

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

IN THIS NUMBER

*Letters from Southern Bank-
ers and Others Describing
the Benefits of Cotton
Mills to the South.*

VOL. XXXIII
No. 7.

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Baltimore, March 11, 1898.

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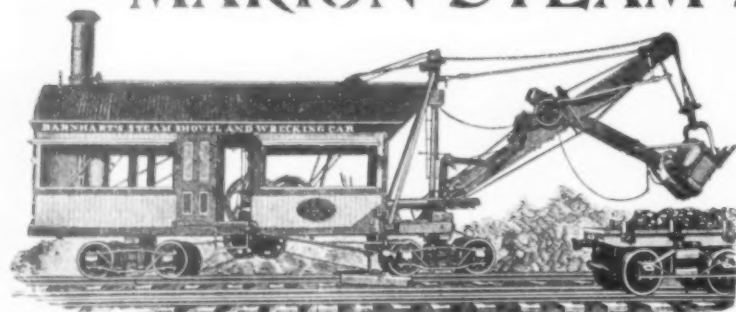
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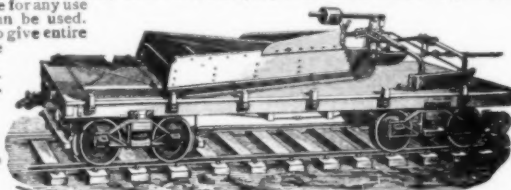
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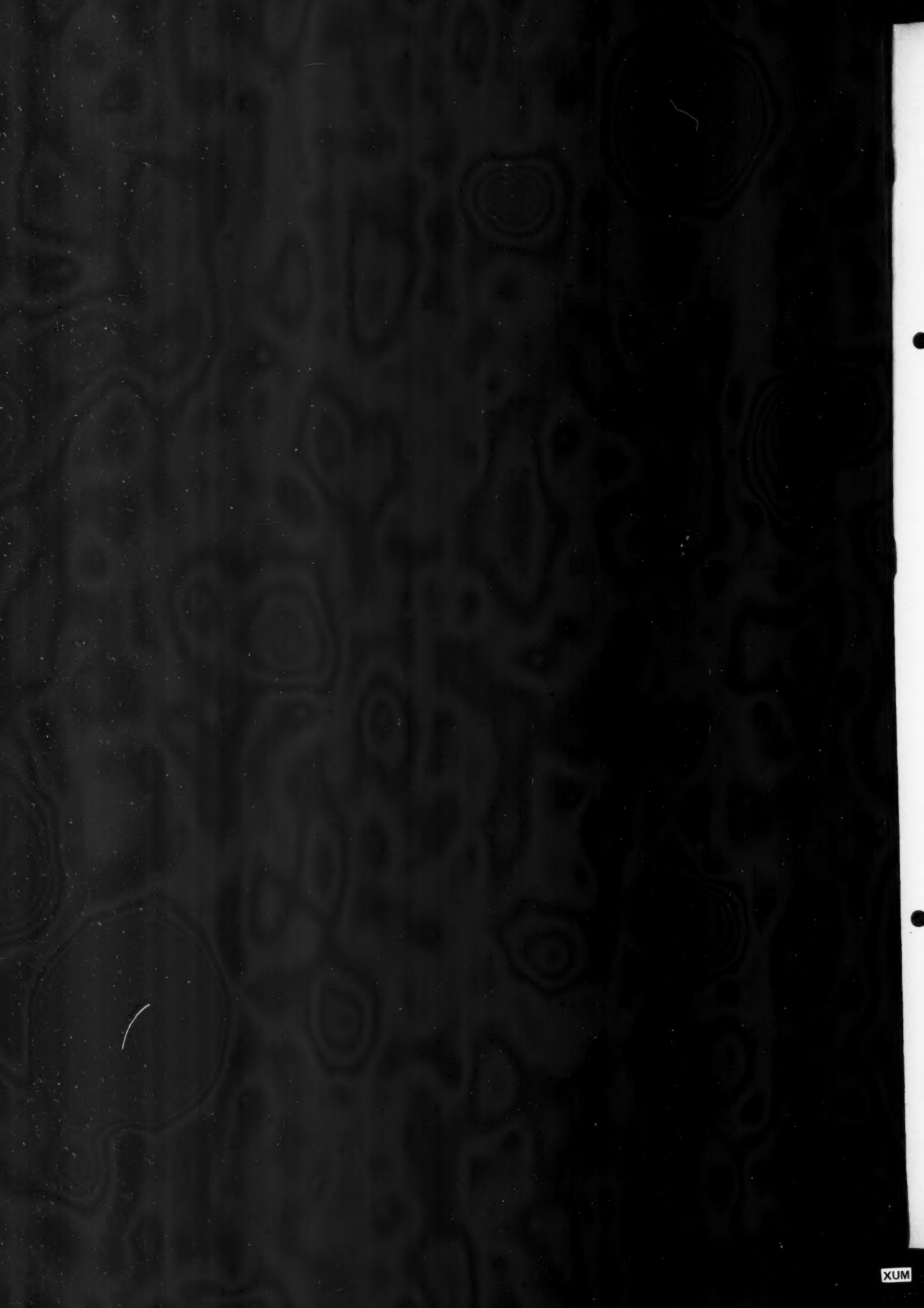
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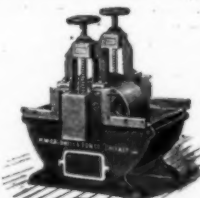


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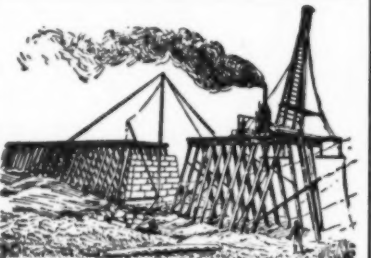
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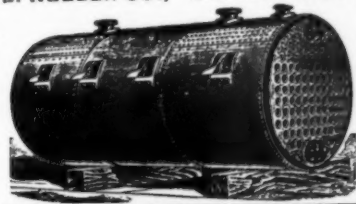
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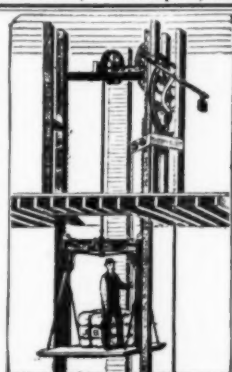
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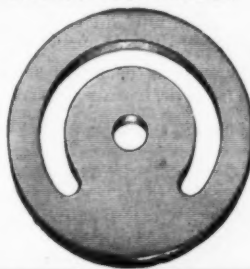
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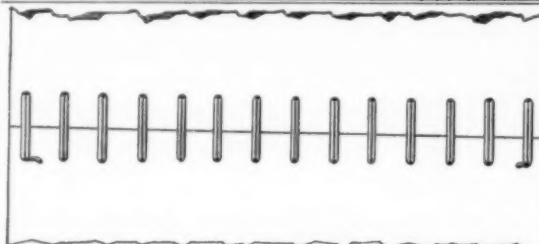
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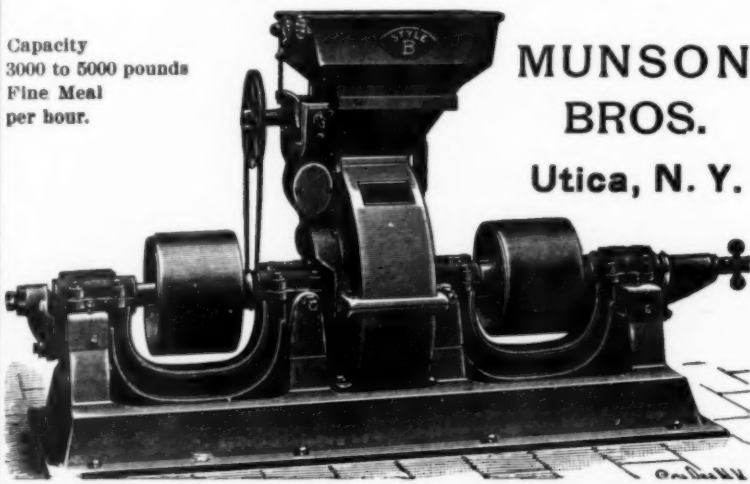
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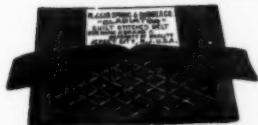
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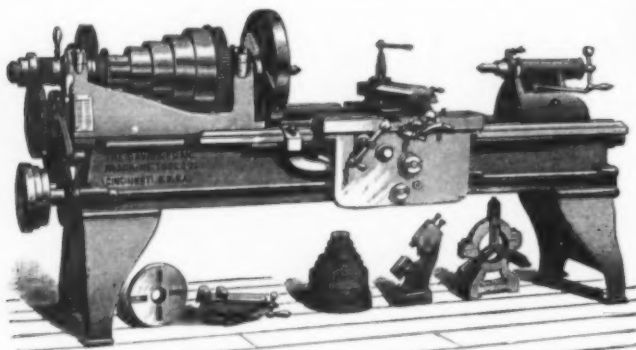
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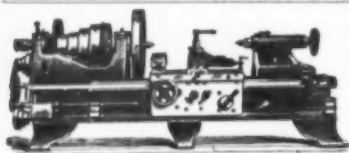
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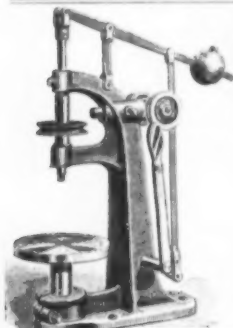
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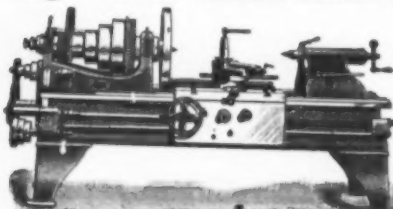
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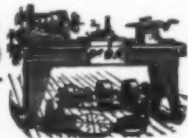
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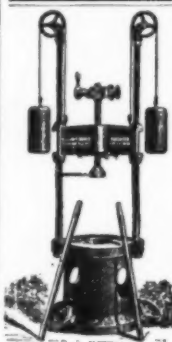
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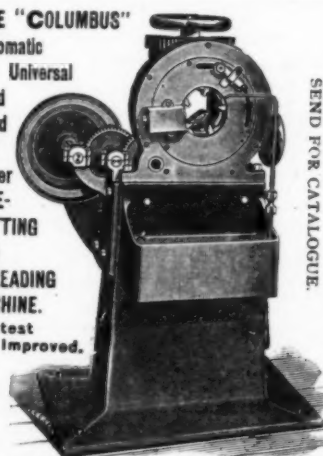
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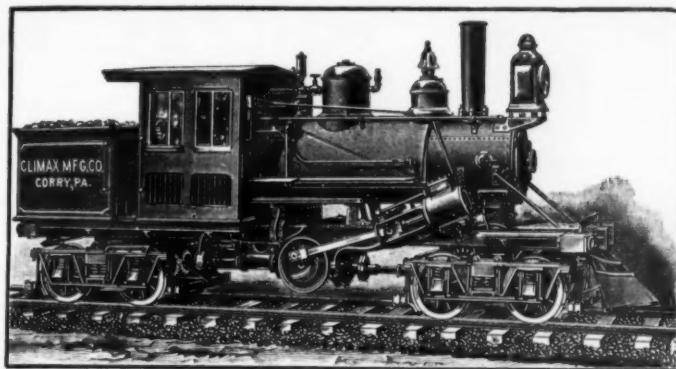
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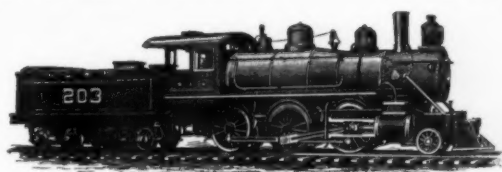
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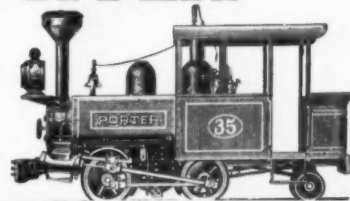
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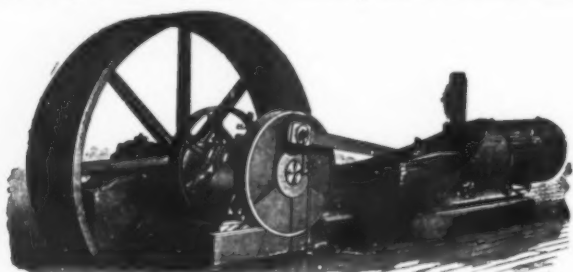
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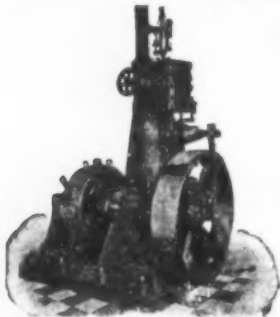
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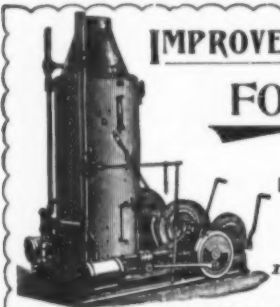
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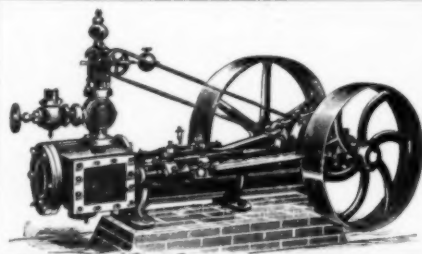
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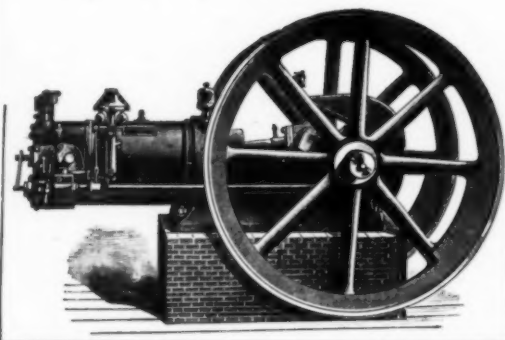
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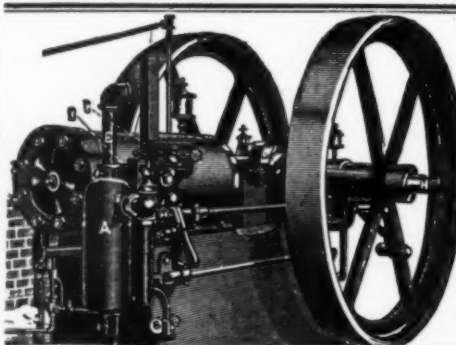
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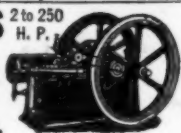
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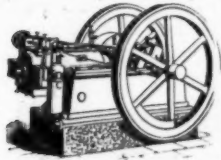
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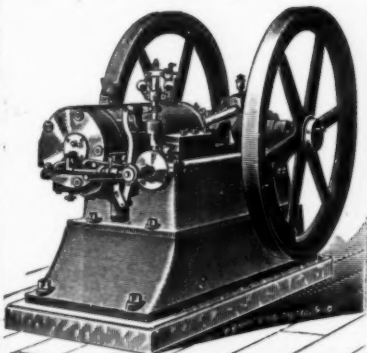
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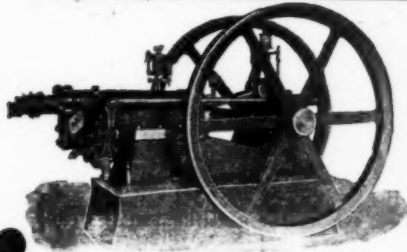
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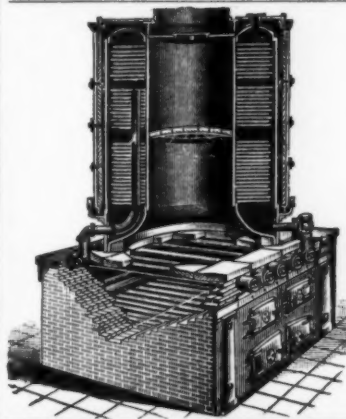
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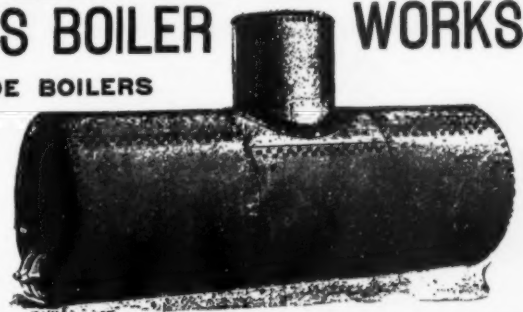
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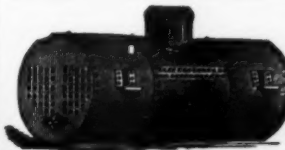
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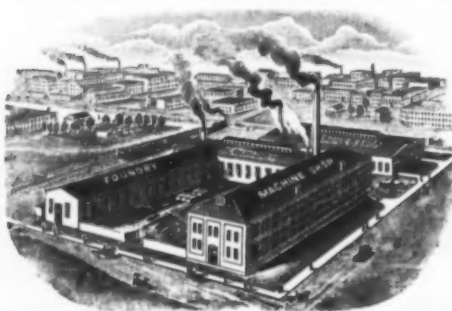
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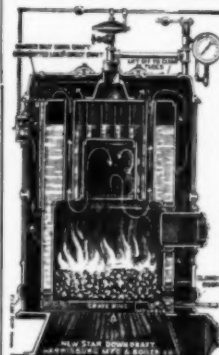
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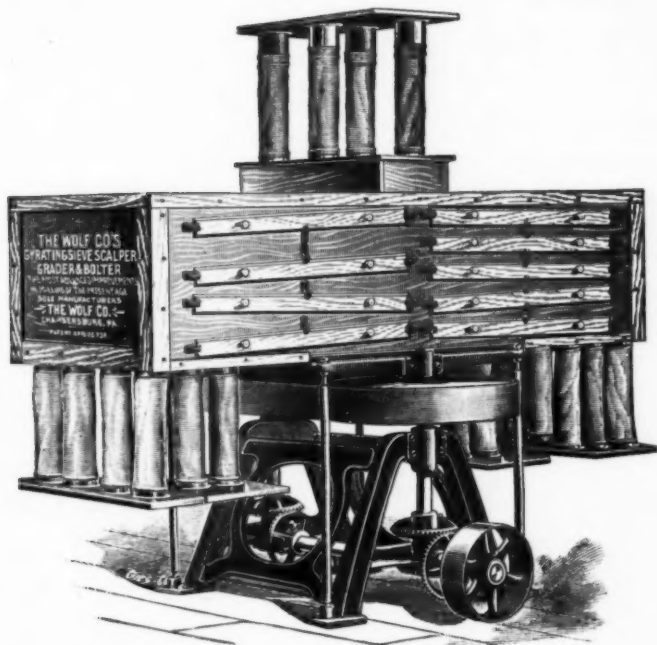
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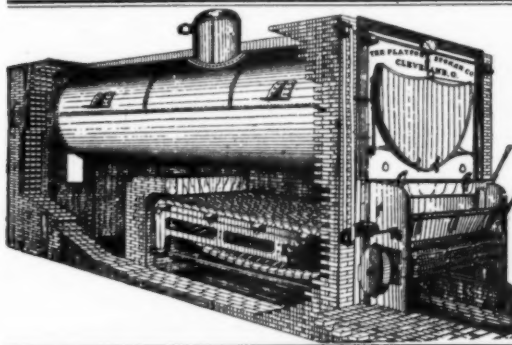
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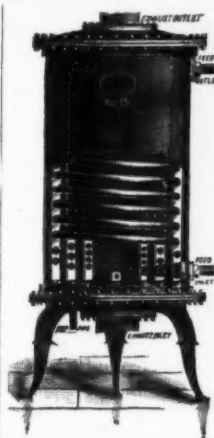
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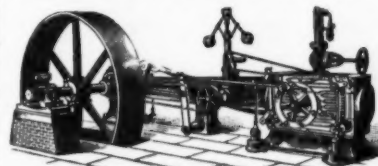
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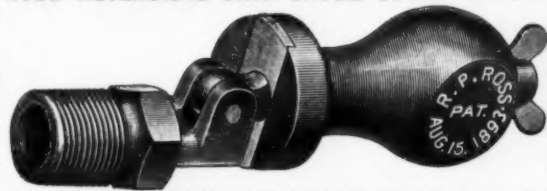
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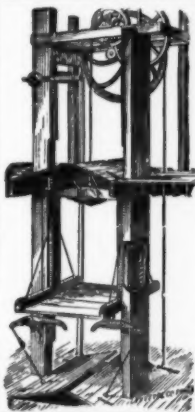


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MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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BALTIMORE, MARCH 11, 1898.

When Railroads Prosper.

Georgia has in her soil and within her borders many millions of undeveloped resources, and out of her wonderful possibilities the wealth of an empire might be developed if we only knew how to appreciate and grasp our opportunities. We have coal, iron, copper, manganese, gold and marble among our mineral deposits; we have immense water-power, an excellent climate, and last year produced more than 1,000,000 bales of cotton, worth, at ruling prices, about \$30,000,000. Increased transportation facilities, more manufactures and business energy are at the present time our most pressing wants. Let us have these, and our problem is solved.—Jasper (Ga.) Republican.

This is true as to the whole South. "Increased transportation facilities and more manufactures" are indeed essential to the greatest prosperity, but we cannot secure "increased transportation facilities" unless the railroads which we already have are prosperous. Capitalists will not build new railroads in any country where old railroads are not prosperous. The South must first see to it that its present railroads are prosperous, then "increased transportation facilities" by old as well as by new roads will rapidly follow. But instead of this we see one Southern State, North Carolina, making a reduction in railroad rates so sweeping that if sustained by the courts it would almost destroy the value of all railroad property in that State. The whole South will to some extent suffer from the action of this one State, while North Carolina itself, which for so many years stood out before the country with a reputation for conservatism and protection to property, will be greatly injured. A few demagogic politicians are responsible, but the State at large must suffer. The Jasper Republican may well study this phase of the problem of Southern advancement. The Manufacturers' Record appeals to the people of the South to take an active part in sustaining and building up to great prosperity its established interests. Let us oppose everything that retards their development and prosperity, and then capital and new industries will rapidly follow.

Cotton Mills as Developers.

Two weeks ago the Manufacturers' Record published a collection of letters from New England cotton manufacturers expressing their opinions about the advantages of the South for their industry. In this week's issue is presented the complement, an exposition of the advantages to the South in the cotton-mill industry. These are elaborated in a number of letters from Southern bankers and other gentlemen, who, in their daily business, occupy an unequalled position for the practical gauging of the results of the building of cotton mills.

These results have been decidedly beneficial. Beside the immediate effects of an investment of capital in a productive enterprise, the benefits include employment for a large class of persons, who are thereby given opportunities which they could not enjoy before, a larger market for garden products, an increase in the value of real estate nearby, and a greater volume of business in local trade. A perusal of the letters enables one to view clearly the changes for good that the location of cotton mills has wrought in many communities. They are powerful arguments for an encouragement of the inclination of Northern capital to unite with Southern capital, energy and resources in hastening the development of the future situs of manufacturing industry of the country.

People Are Not Idiots.

More than once during the past two or three years the Manufacturers' Record has been obliged to criticize sharply the position assumed by representatives of the movement intended for the preservation of the country's credit, that those opposed to them were dishonest or idiotic. To call a man an anarchist is not the best method of appealing to his reason. To treat a man as though he lacks common sense is not the best way to impress him with your own virtue and intelligence. This attitude is generally an unconscious one, but it nevertheless merits correction. Another occasion for correction has just arisen and it should not be neglected.

At the last meeting of the American Bankers' Association a committee was appointed to take up the work "of informing people as to the uses of a bank in every community, the object being to do away with the present hostility which exists against banks among those people who have not been truly informed." The committee proposes to send out a pamphlet intended "to set forth in the simplest manner possible the work which a bank does in the community." It "is intended as a primer; the facts stated are elementary and not in dispute, and the manner of stating them is intended to be so clear that all can understand." So the matter is explained in a letter accompanying an advance copy of the pamphlet which the Manufacturers' Record has been fortunate enough to receive.

The pamphlet, as a whole, may best be described as yellow literature applied to finance. It is entitled "What Is a Bank? By William C. Cornwell, Author of 'Greenbacks,' With Designs by the Author." If the word "designs" means purposes, they are readily perceived in the first assertion of the author, "A bank is a place where money is left for safe keeping." Though he elaborates the operations of a bank, that sentence is a terse explanation of

the frame of mind of many so-called bankers toward "people who have not been truly informed," and who cannot rid themselves of the conviction that a bank should be defined as a clearing-house for credits. The present hostility is really due to a profound knowledge of what the present banking system is and an honest belief as to what it should be.

If by "designs" is meant the florid and dyspeptic blocks of color, or their bilious combination, used as illustrations in the pamphlet, we can only remark that no matter what the author intended to mean, in employing such kindergarten arguments he has not clarified the situation, but has rather added to its embarrassments.

The people of this country want no primer of this kind, even though it be an unconscious reflection upon their intelligence. The best means for laying "the present hostility" is for the banks to permit, or rather to strive earnestly for a modification of the system under which they are working—a system devised for a special purpose in time of stress, which does not meet the needs of the country and which will inevitably work to the injury of the banks unless it be modified.

The masses of the people are not hostile to banks. But among them is a strong opposition to the evils of the present system recognized directly by such eminent financiers as Mr. Stuyvesant Fish and by the action of the Indianapolis monetary convention. The aim of bankers should be to prevent that opposition taking the form of hostility.

In North Carolina.

The Manufacturers' Record has received a letter, upon the official paper of the State auditor's department at Raleigh, challenging our position on the subject of the recent action of the North Carolina railroad commission in reducing rates of fares. Though the author of the letter inadvertently ne-

glected to sign his name to it, we deem it worthy of attention. We do not deny, for, in fact, we expressly recognized the fact expressed by our correspondent, that "this State and its people are noted for their conservatism. They have more frequently submitted to what was not right in order to avoid disturbance than people of any other State." It was on account of that very fact that we expressed sympathy with the State now "staggering under influences detrimental to its real interests." Our correspondent objects to that phrase and quotes figures of the charters of business enterprises since 1895 to sustain himself. There is no denying that his figures are correct. Our point, though, in dealing with North Carolina, as with other States, is not that it is not advancing. The natural strength of the South is such that it has been able to advance in spite of influences that would have wrecked other parts of the country. But in the absence of those influences, we contend, North Carolina and other States would have been able to present a far better showing.

Our correspondent goes to the root of these malign influences when he says that "there is in this State an element of population which has for almost a generation made politics a business and the basis of its sustenance. This element has recently lost the power to practice its profession." The first sentence is true. Recent events prove the incorrectness of the second. The men have changed, but the element survives more pernicious than ever. The people of North Carolina, instead of crushing the element, have merely transferred the business to other hands worse than before.

That is why we sympathize with North Carolina. It is a State of almost unequalled resources, and its people have stood for conservatism, for protection to life and property, and for great energy in business advancement, but the politicians have been the State's greatest disadvantage.

Regulating the Railroads.

In commenting on a recent article in the Manufacturers' Record relating to the proposed increase in the powers of the interstate commerce commission, and the tendency of the times to regulate everything by commissions, the Baltimore Sun says:

In a recent issue of the Manufacturers' Record the proposal of Senator Cullom to give the interstate commerce commission power to fix railroad rates is sententiously described as "government by commission." Why confide government by commission to the railroads, it is asked, if the principle is correct and the results are just and good? Why not apply it also to factories, furnaces and commercial corporations generally? Such a scheme would supply infinite spoils for politicians. "We should soon have," says the writer, "not merely a few railroad commissions, but hundreds of other commissions, State and interstate, to say nothing of the thousands of city and county commissions, which would be necessary in order to regulate everything that needs regulation. We should have

everywhere a mercantile commission to regulate the stores; a landlords' commission to regulate rents, and, as there are a great many people who want to buy live stock and corn and wheat, even fowls and butter and eggs, at lower prices than the farmers are willing to take, we should have an agricultural commission to regulate the prices of produce."

Senator Culiom's bill presents a belated issue. Time was when the railroads were prosperous, carrying things often with a high hand and enforcing high rates and discriminations, with little regard for public or private interests. They were the only very large aggregations of capital with which the public was acquainted, and it was easy to influence the popular mind with the idea that their abounding wealth was a menace to public interests. But that time is long past. The railroads are at present not at all prosperous corporations, but, as a class, are struggling with adversity in the form of unremunerative rates and vanishing profits. Rates are lower than were ever known before and far lower than in any other country. Very few pay dividends on their stock and many are unable even to pay interest on their mortgage debts. If the railroads were ever a danger to the public, at present their teeth have been drawn by merciless competition, and their owners are objects of pity. The losses of holders of railroad stocks and bonds—largely widows, children and old men incapable of active business—have in the last five years aggregated many hundreds of millions.

One of the most broad-minded railroad officials in the country, in a letter to the editor of the Manufacturers' Record referring to this same article on which the Sun's editorial is based, writes:

Comparatively few writers upon railroad subjects possess the necessary knowledge and qualifications to the taking of a broad and comprehensive view of the whole subject, and particularly of the relations between the railroad and the State, and it was, therefore, particularly gratifying to read Mr. Grasty's treatment of it.

Without entering into details, which would be quite unnecessary (especially as this is not written for publication), I would point out a very strong tendency on the part of a certain school of politico-economical philosophers, as well as another large class that expect every ill of the social or political body to be healed by legislation, to extend the powers of government and of administration to the utmost possible extent. In the latter character in particular there has been more or less of a cry for the extreme measure of State ownership of railways and other great business systems, the ultimate result of which would naturally be absolute communism.

I need scarcely point out that such crude theories proceed usually from absolute ignorance of the subject and of the economic history of the world. State ownership has been tried to some extent in this country, but has invariably proved a failure. It exists today in Germany, France, Australia and other foreign countries, and while it has not proved an utter and absolute failure there, inasmuch as the system still exists, it has, as a rule, paralyzed all energy, enterprise, the natural development that comes from business competition, and any spirit of accommodation to the public, while private capital and private enterprise are drifting into other channels of employment.

This, of course, is a subject farther beyond the claims to which Mr. Grasty replied, but the difference is much more in degree than in principle, and it appears to me that the economic principles laid down by such recognized philosophers and economic students as Herbert Spencer and John Stuart Mill, to say nothing of Thomas Jefferson and the original democratic school, properly leave such matters to private and corporate hands, relying upon established economic laws not only for the protection of the public, but for the ultimate best interests of State, public corporation and individual.

Lake City's Outrage.

In a letter to the Manufacturers' Record Messrs. T. B. Field & Son, merchants of Wellsboro, Pa., write:

Will you not give us an editorial on the recent occurrences at Lake City, S. C.? Is it probable that people who live in law-abiding communities will care to go to a place where such things are possible? The New York Daily Tribune often quotes you.

We suggest you clip from that paper of the 24th and 25th inst. and accompany same with your own comments, which are always fearless and to the point. We merely offer the above as a suggestion, and trust you may see your way clear to use it in some measure that will ultimately have a tendency to correct these tendencies.

We have read the New York Tribune's editorials, and find in them no stronger condemnation of the Lake City outrage than has appeared in the newspapers of North Carolina, South Carolina and other Southern States generally. The Lake City outrage was a crime of savage barbarity. It was absolutely unjustifiable, though it was the legitimate fruit of a malign influence in American politics that would, for partisan sake, undo the good effects of broad-minded statesmanship. But no wrong ever justified another wrong. The question of our correspondent is hardly germane to the subject. But we will answer it. There is no more chance of people caring to go to Lake City, S. C., than to Urbana, Ohio, Lattimer, Pa., or any other place where lawlessness may break forth. That spirit is confined to no State or section. It will not be overcome by sectional flings, which are natural to the New York Tribune. It is a growing problem that requires the sober thought and patriotism of men and women of every part of the country.

Could Not Do Without It.

In a letter to the Manufacturers' Record, Mr. William E. Ashley, superintendent of the North Carolina Car Co., of Raleigh, says:

"Our car company has taken your paper almost ever since it was first published, and we do not well see how we could get along without it now."

Sales of Zinc Properties.

[Special Cor. Manufacturers' Record.]
Joplin, Mo., March 7.

Two important deals have recently been made in this lead and zinc district to Philadelphia capitalists. The June mine, on the Rex tract, was sold March 3 for \$30,000. This mine is less than a year old, but started off with a record of 42,000 pounds lead in one week, and 35,000 to twice that amount each week since. The mine is also rich in zinc, and a new concentrating plant has been recently erected. The other property purchased by Philadelphia parties is the famous "I Know" mine in Leadville Hollow; the purchase price was \$30,000 cash. The mine has a record as a zinc and lead producer second to none in the district.

Looking for Manufacturers.

[Special Cor. Manufacturers' Record.]
Shelby, N. C., March 5.

Citizens of this place will welcome manufacturers from any part of the country locating here. The water-power is unexhaustible. The Southfort and Catawba rivers run east of the place, and the Beard river northwest. Wood can be had for \$1.15 a cord. The town is on the Seaboard Air Line and P. R. & C. railroads, two competing lines, while the Southern Railway is but ten miles distant.

The Alabama Scientific and Industrial Society has elected the following officers: President, Prof. M. C. Wilson, of Florence; vice-presidents—J. G. Moore, of Blockton; Charles Geohagan, of Birmingham; Joseph Squire, of Helena; James H. Pitts, of Tuscaloosa; James A. Montgomery, of Birmingham, and J. W. Minor, of Thomas; secretary, Dr. Eugene A. Smith, and treasurer, Henry McCalla.

PRAISED ON ALL POINTS.

The Houston Business League, Secretary's Office.

Houston, Texas, March 5.

Editor Manufacturers' Record, Baltimore, Md.

Dear Sir—The Manufacturers' Record occupies a unique field among the publications in this country. No journal of its class anywhere on the continent has greater influence, and certainly none can compare with the Manufacturers' Record when it comes to assisting Southern development.

While your publication has always been persistent, it has at the same time been consistent and reliable. In no instance has it given Maryland preference over Georgia, nor has Texas been treated with greater consideration than Mississippi. The merits of every section of the South have been heard through the columns of your publication, and I do not believe I overestimate the influence of the Manufacturers' Record when I say that it has done more to encourage the establishment of industrial institutions in the South than any other ten agencies combined.

The position you have taken in plainly and boldly telling the truth about objectionable laws has invited the closest and most careful scrutiny of Eastern investors, and in some cases with which I am familiar these investigations, started for the purpose of finding faults, proved to the investigators that the South had attractions and advantages that would overcome the objections, and as a result new industries were located. Your publication has had a good influence upon this particular locality. Its subscription list is large in Houston. The paper is not only carefully, but generally read, and a great many have become interested in seeing new industries located in Houston directly through the influence of the Manufacturers' Record, and what is true in this community must be true in others. The Manufacturers' Record some years ago earned and continues to hold the confidence of moneyed men in the East. Some of the articles appearing in your columns have been equal to those in the leading magazines in point of literary merit, and vastly more beneficial because of their direct and practical nature.

I feel that you have a perfect right to take to yourself and your publication a large portion of the credit for the immense increase in cotton manufacture in the South. In the article you prepared for the New York Sun early in January, showing that the South had in 1880 180 cotton mills, with a capital of \$21,900,000, 667,000 spindles and 14,000 looms, and that today there are in the same territory 490 mills, with a capital of \$125,000,000, 4,100,000 spindles and 115,000 looms, you told of a marvelous growth in the industrial South, in which no agency has been as active and untiring as has the Manufacturers' Record.

In the development of Gulf-port interests your publication has been untiring, and has presented for the use of the people of the country arguments in a forcible, and in many instances in a condensed form, that the best advocates of Northeastern ports could not answer.

You have probably decided before this that I am somewhat of a partisan of the Manufacturers' Record, and while I may have used the name of the paper so frequently as to be considered guilty of tautology, I trust that if you care to publish what I have written, the proofreader will be instructed to print the name of the paper every time it appears, and to repeat it if necessary.

With best wishes for your success, I am, yours very truly,

TOM RICHARDSON, Secretary.

Birmingham Iron Situation.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., March 8.

The conditions of the iron trade are not satisfactory so far as the volume of business is concerned. It is very light from domestic sources, and the cause is a matter of conjecture. There has been no period of buying activity since last September. The arrangement agreed upon by the furnace interests for mutual benefit is of such recent birth that its success or failure cannot yet be discussed. While production South since September last has been practically uniform, it has largely increased with our Northern competitors. Approximately speaking, 80 per cent. of the domestic trade of the Southern furnaces comes from north of the Ohio river. They cannot afford to be forced out of that trade. They must hold on to it if they would remain in the trade. In their efforts to reduce stocks and to retain the trade, Northern furnaces have made, in cases necessitating it, prices that eliminated their profit and forced the Southern furnaces into back seats. This condition, if continued, must be met, and the result will be crowded benches of mourners in the iron trade.

The export trade is looming up. The inquiries have increased, and transactions have been large and more frequent. For the week they will foot up 7000 to 8000 tons, and 4000 to 5000 more in treaty waiting confirmation. For No. 3 foundry export demand is especially good. The rolling mill reports business as very fair, with nothing in it meriting

special mention. As a striking evidence of the growing importance of this point in certain lines, it is stated by officials of the Birmingham Foundry & Machine Co. that they are now and have been for some time past refusing orders for Corliss engines. They have booked orders for all they can build up to next October. Their other departments are also full of a season's work. The same conditions exist at the Hardie-Tynes Machine Works. The Hood Machine Co. has every department crowded with work. The oil mill, just concluding the season, in results doubled last season's business. The Warrior Machine Works has been forced by increased business to acquire added room. The Williamson Iron Co. don't speak of it, but its shops and yards are emphatic with the evidence of plenty of orders. And it is so all along the line, with once in awhile a fellow waiting for the work to hunt him up. J. M. K.

To Decrease Disease.

Referring to the late quarantine convention at Mobile, the last bulletin of the North Carolina board of health gives a valuable hint to the proposed April convention at Atlanta when it says:

"It seems to us almost a self-evident proposition that the practical and sensible solution of this matter is to turn over to the general government absolutely and entirely maritime quarantine under the administration of the Marine Hospital service, and let us, the States and municipalities, devote all our energies and what little money we can get to local and internal sanitation."

GROWTH OF SOUTHERN COTTON MILLS.

Prominent Bankers and Others Tell of Their Advantages to This Section.

That men of affairs appreciate the importance of the textile industry to the South is shown in the hearty responses to a circular of inquiry sent recently to a number of bankers and other gentlemen in that section. Such men are in the best position in the world to observe the effects of an industry upon their respective communities and neighborhood. They are the channels of interaction among manufacturer, employe, property-owners, merchants and providers of food. It is their business to study the effect of any movement likely to affect their own interests, and their opinion is generally founded upon clear observation and sound judgment.

Consequently, their letters are a significant and valuable contribution to the discussion about the relative advantages of the South and the North as cotton manufacturers. The letters, which are unusually full and explicit, follow:

A Center for Manufactures.

G. Gunby Jordan, president the Third National Bank, Columbus, Ga.:

"This city is largely a manufacturing one, and is engaged in varied forms of manufacturing. Iron works, barrel factories, two large flour mills, woolen mills, cotton mills and clothing factories are some of the most important industries located in Columbus, Ga.

"As there are four falls in the Chattahoochee river within a distance of two miles of the courthouse, and as two of these have been already improved, and another one, and much the largest of all, is in the course of improvement, being developed electrically for about 12,000 to 14,000 horse-power, and as the fourth one has been somewhat improved, and doubtless in the near future will attract that attention which it justly deserves, we feel that the immediate future is very bright for Columbus in the cotton manufacturing line.

"You are doubtless aware of the fact that this town receives about 170,000 bales of cotton annually, and that the mills located here have a great advantage in this—that they have the benefit of a local market for cotton of good grades.

"It is entirely feasible, and this has been already demonstrated, that the mills can locate just outside the corporate limits and avoid all municipal taxation. A strong movement has recently been made by the people of the State to have a constitutional convention to allow counties to vote for the purpose of relieving new mills of county taxation for a term of years, and with the very cheap power in this city, much of which is now being delivered to the corporations electrically, and much more will be in the course of a year, there is every reason to believe that this will be one of the most important manufacturing towns in the South.

"The success of cotton mills here has been uniform, wherever capable management applied. The dividends in such corporations have been regular, and we have the satisfaction of knowing that the mills here have never shut down and have only run as little as three-quarters time during a few weeks of the last panic when it was very difficult to get currency to pay the operatives.

"The labor supply here is good, because this has been a manufacturing town for a great number of years, and the help are accustomed to this work and the town naturally draws to it that class of labor, and new mills would have no difficulty in obtaining a very competent and

satisfactory class of operatives when located in our midst.

"Cotton mills, as you know, are manifold in their advantages to any community, and ours has been no exception to this rule, because we have several very large and important clothing manufacturing establishments here, roller covering factories, and other such incidental enterprises as follow in the wake of well-conducted cotton mills. And the clothing factories consume the products of the cotton mills, and in turn give employment to a large number of worthy operatives.

"The operatives of Columbus seem to be entirely contented, and are earning sufficient wages to live more comfortably than ever before in their history, because wages here have declined practically none at all, while the various necessities of life have gone down materially, and they are enabled to purchase the things which make life worth the living for much less than ever before in their history. It is the common rule for operatives to own their own homes, and with the great number of building and loan associations offering money on long time, with easy payments, with cheap lots either within the municipality or immediately beyond the corporate limits, it becomes an easy matter for any sober, industrious operative to soon own his own cottage and be comfortable under his own vine and fig tree. The equable climate has its manifold advantages, in that very little money is necessary to be spent either in fuel or heavy clothing.

"The free schools of this town are of every known character, and cover all the wishes which any workingman could desire. For instance, we have a well-organized system of graded public schools, this being the first town in the South to establish a thoroughly graded public school, which gives to every child a free education during the regular school hours. Then the Head, Hand and Heart Society has what is known as a 'Dinner Carriers' School,' whose hours conform to the idle moments of young children whose parents require them to carry meals to the different corporations where they are employed. This is a great boon, and fills a long-felt want. The free kindergarten system, managed by those self-sacrificing women who make every community their debtors, take all the children from the highways and byways during the impressionable periods of life and give them free education, which saves at least two years in their scholastic apprenticeship to reach any designated point of development. We have also free night schools for such of the operatives as desire to avail themselves of them.

"Muscookee county has worthily established the reputation of being the lowest tax county in the State which has made any progress in the development of its roads and bridges and enjoys modern public buildings.

"You will readily understand that operatives adequately paid, contented and happy, with all the advantages that the various characters of schools above described give them, can have but one effect on the mercantile business, and that of a most salutary and pleasing character. For all such trade as this is cash, every mill here paying once every two weeks, in money alone. It has given a wonderful impetus to truck gardening and the smaller farms near us, and one of the immediate effects of which is we have a splendid colony of Western men

who have come in and organized their community with schools and churches very near to the city, and more are coming continually.

"The writer has for years been directly or indirectly engaged in cotton manufacturing in the South and has some interests in that direction, and unhesitatingly desires to say that nothing, in his opinion, would so readily and permanently benefit both the Eastern manufacturer and the State of Georgia as a thorough appreciation on the part of the New England manufacturer of the manifest advantages which this State offers to cotton manufacturers, and especially on what are known as the medium and coarser numbers. With four waterfalls within the space of two miles, if moisture in the air is needed, we have it without any artificial aid; if a climate which is genial is desired, it can be found in this State; if contiguity to coal is desired, we are within less than 150 miles of the immense coal fields of Alabama; if water-power or electrical power is desired, Columbus has the distinction of being the first town within the State which has a mill driven by electricity. The entire car system here, the lighting, heating, the motors which drive them, and the pressing for the clothing factories, is all electrical.

"The cotton market is at the very door. Railroad facilities for shipping out products are ample and satisfactory, and a navigable river to the Gulf is here, with several lines of boats plying it.

"The thanks of the State are due the Manufacturers' Record for its intelligent statement of facts, and I wish you much success in the movement which I learn you are now engaged in, viz., that of presenting truthfully the advantages of the South for cotton spinning and weaving."

The Effect of Cotton Mills Upon Agriculture and Trade.

Frank Hammond, president of the People's Bank, Greenville, S. C.:

"The beginning of the cotton-mill success in this section dates back to 1874, when Col. H. P. Hammet began the Piedmont Mill. This mill is truly the basis of the great success attending cotton manufacture in this section, and too much praise cannot be given its founders for the carefully laid plans and indomitable will with which they founded a great industry. It began as a mill costing \$100,000. Today it has a plant that has cost something over one and a-quarter million dollars, and has paid out dividends amounting to more than the capital stock. It is managed now by Colonel Hammet's son-in-law, Col. James L. Orr, and pays a regular dividend of 10 per cent. per annum.

"Following upon the success of this mill is the Pelzer Mill, situated five miles below the Piedmont, having a capacity of 103,000 spindles and the largest number of Northrop looms in any one mill in the country.

"In addition to these, I might mention the Reedy River Manufacturing Co., which in the last ten years has grown from 3000 to 12,000 spindles, having paid for the increase entirely out of the surplus of the mill. Also, the Pelham Mill, which is situated upon the site of the old Lester Factory, which was one of the oldest mills in this section, having been built in 1825 by a young man who learned the cotton-mill business in the now famous old Arkwright Mill, near Providence.

"Among the later mills in this neighborhood are the Mills Mill, the Poe Mill, the Huguenot Mill and the Victor Manufacturing Co., to which should be added, while not in this county, the Courtenay Manufacturing Co. and the Norris Cotton Mills.

"These Southern mills are almost entirely managed and conceived by Southern energy and Southern money. The labor is entirely native, being taken from the neighboring farms and villages. So far as I have been able to see, there is sufficient labor for double and treble the mills now in operation. I know that applications have been made this year to all the cotton mills in this section for places in the mills by hundreds of people and have been turned away. The operatives are not only contented, but happy, as a visit to the mills will show. In most instances the mills are located on the line of some railroad, the manufacturing company owning all the houses and ground. The management have generally been careful to see that good schools are maintained in their villages, supplementing the amount received from the public funds to keep them in operation all of the year. In addition to this, they have been liberal in their contributions toward the building of churches of the three denominations found in this section—the Baptist, Methodist and Presbyterian. In a large number of instances they have gone still further than this and established circulating libraries, in which are found the best books, as well as the leading periodicals. There is no complaint from any quarter. The management and the help are in close touch, and there is an entire absence of the autocratic use of power of the management over the help that would tend to make them discontented.

"The effect of the building of these mills upon business interests, of course, has been good. The village of Piedmont has about four thousand and the village of Pelzer about seven thousand people. The other mill villages are smaller, of course. The building up of these mill villages has made a home market for the by-products of the farms, such as vegetables, poultry and so forth, which heretofore have not been profitable on account of the limited demand for such products. As the result, contiguous farm lands have doubled and trebled in value. I know of some instances in the vicinity of these mills where lands that were formerly worth from \$5 to \$6 per acre, are now worth from \$35 to \$100 per acre, and find increased sales at these prices, while before it could not be sold at the lower prices. Another indirect fact that has increased the price of lands in the vicinity of the mills is that thrifty families, earning good wages at the cotton mills, soon accumulate a surplus sufficient to buy a good farm. Of course, under these conditions the value of our business has been increased, and not only this, but farm methods have been improved, lands more carefully tended, better homes erected, better stock and an improved condition generally exists.

"Heretofore in the marketing of the cotton crop the farmers usually went to the courthouse towns to sell their cotton, involving frequent journeys of twenty to thirty miles. The cotton mills have made a market for their cotton right at their door, and at prices frequently better than could have been obtained when the cotton was marketed for foreign shipment. Of course, the increase of the number of markets has decreased the annual sales at these courthouse towns, but, notwithstanding this, the old towns have grown largely, and, in my opinion, have settled on a better basis of prosperity by reason of the cotton mills than they would have had their trade depended entirely upon the sale of agricultural products.

"Another improvement which I note has come in with the cotton mills has been a tendency to do business on a cash basis, which was impossible under the old conditions, when all of our money

was congested in the three or four months, and the business for the balance of the year had to be done on the credit basis until the crops were marketed for the coming season. This, of course, has made the money market easier throughout all the year.

"There is still room for those who desire to build more cotton mills in this section. There are magnificent water-powers undeveloped that range from 1000 to 10,000 horse-power all through this Piedmont section. There is an abundance of the best of labor and all the building material, whether brick, wood or stone, that could be used in one hundred years. There are no unfavorable laws to corporations or capital, and a careful scrutiny and comparison of our State court reports with those of other Southern States, or any other State in the Union, will show that there has been the least number of damage suits against corporations, for either real or imaginary damages, than of any State in the Union having the same number of corporations in existence.

"While there is not an abundance of idle capital in this section, a good man can always obtain co-operation and a considerable quota of home capital to go into any promising enterprise. Added to this is a climate for the manufacture of cotton goods which is not surpassed in this or any other country. The summers are not oppressively hot and the winters are not cold. A careful investigation of all the facts set forth show that they have not been overstated."

Friendly War of Spindles.

Frederick B. Gordon, Columbus, Ga.:

"Having resided in both the sections now engaged in this friendly war of the spindles, I will endeavor to treat the matter both briefly and impartially. The periodical agitation of this question is as inevitable as it is interesting. The query, which is the better section for investment in cotton mills, New England or the South, is calling forth many newspaper articles from both the wise and the unwise. The recent deliverance of a committee of the Arkwright Club of New England, emphatically acknowledging the superiority of the South for cotton spinning, has brought forth as sharp criticism from manufacturers of New England States as it has the quick endorsement of those who are practically informed as to the conditions surrounding this vast industrial interest as carried on in the South.

"The New England theorist who is not fully informed or personally acquainted with all the peculiarities of Southern social and economic conditions is no more capable of intelligently handling this question than is the Southern newspaper correspondent who makes a flying trip through New England mill centers and floods the country with a lot of quickly conceived impressions, born of prejudice, sentiment and general ignorance of the subject. Yet truth will tell and is telling. Manufacturers and close students of the textile industries in this country know that the wonderful growth of the Southern States in the building of cotton mills, although the total investment is small as yet in comparison with New England, is but the forerunner of immense development of the spinning industry of the South.

"Shrewd New England mill men who have large manufacturing plants at home are putting branch establishments in the South and are also quietly at work, through expert agents, seeking out and locating the best and cheapest water-powers in the South for future investment. There will, however, be no sudden influx of large New England mills

into the South, but the country can rest assured that new cotton mills, if built, will hardly be built in New England. The country is long on cotton mills at present, but every new mill built in the South will help to silence some old mill struggling along under New England conditions. But why should every Southern community rush off to New York, Providence and Boston every time they want to build a cotton mill? Why not build it themselves? Southern boys, 'raised' since the war, can out-Yankee the sons of New England who have been 'brought up' since the late unpleasantness. While the former have been learning the practical lessons of adversity, the latter have been toying with the theories of luxury. True, many sons of New England mill-owners and mill officials have embraced the grand opportunities offered in this country and abroad for technical training—a matter now only beginning to receive tardy recognition in the South—yet along general lines of business aggressiveness the educated young Georgian of today will stand his hand with anyone.

"Then, sons of the South, why sell your birthright? If you want outside capital to flow into your section, grasp first, yourself, the opportunity at your door, and outside capital will quickly compete with you for it. If you don't value it yourself enough to improve it, the foreigner will hardly do so. Any legitimate investment in a Southern textile plant can receive Northern aid through commission-house and other channels if its merit warrants the attention of such capital. To one familiar with the two sections there can be no doubt that the most important considerations, the great natural advantages, are all practically with the South, while the artificial advantages, such as a larger number of skilled workmen, better money facilities and better marketing opportunities, are as yet with the New England mills. The former change not; the latter are as shifting as the sands. Granting the same ability of management, a new mill in the South will today earn a larger dividend than the same new plant if located in New England.

"Hence, the new mills must have Southern locations, and it rests with the South to build them to the extent of their ability, and then to extend the glad hand to the Eastern investor, who generally knows a good thing when he sees it, and by safe legislation and conservative laws do everything possible to make his investment in the South both pleasant and profitable. For rapid industrial advancement Georgia must dream no longer along the line of dead issues and must drop from political preferment the many demagogues who fatten upon the prejudices of the people. Let Southern speakers deal less in traditional oratory and teach the people the sound economic principles that must prevail ere the South can reach the position in the industrial world which she claims by the right of climate, by the right of abundant and cheap power, by the right of her great cotton crop and magnificent forests, and by the right of her world-famed deposits of coal, iron, marble, lime and every other mineral needed to make her the manufacturing center of the world for centuries to come."

Success from the Start.

First National Bank, Rome, Ga.:

"We have in this section some of the most successful cotton mills in the South, to wit: The Rome Cotton Factory, under present management, is doing splendidly. It is now running day and night, and its output is sold far ahead. The Trion Manufacturing Co., within twenty-five miles of Rome, has been very

successful. It pays handsome dividends every year. The Massachusetts Mills in Georgia, in this county, has been a success from the start. The labor supply is abundant, and that of the very best home-raised class. There are in the mountain counties lying north and northwest of Rome thousands of men, women and children who have an honest desire to secure work of this cotton-mill kind. There is no question on this point, and mills contemplating location in this section need have no fears.

"The effect of the large distribution of money by the mills, to the operatives and for material, in this section is felt in almost every direction in that our usual summer dull trade (which is the natural condition of all cotton-planting countries) is hardly felt at all. I regard both physical and moral conditions of the operatives in our mills as improved and improving. Ample school and church privileges are being provided for them, and the supply of these privileges will be kept up to the demand.

"We understand from those in position to speak with authority that the operatives, especially females, are very contented. Under the old conditions they were wholly dependent upon a rather scant living from the mountain farms, where they could contribute but little to their own support. This self-dependent spirit is encouraging, and the desire for similar employment is spreading through that class of people.

"To a degree, mercantile business, banking and farming have felt the good effects of cotton mills here, and feel that if we have located in our unsurpassed climate and section many more mills our section will blossom as the rose. Rome cotton is of a very superior quality, and is as well known in Europe as in the United States. Taking everything into consideration—climate, water, railroad facilities, fine quality of cotton and our abundance of operating labor and the low price of coal—we feel that no mill company contemplating establishing a mill in this section should decide upon a location before coming to Rome. 'All roads lead to Rome.'

"One day last summer, when the fine peach crop of North Georgia was being harvested, a Tennessean remarked to the writer: 'Did you ever think what a magnificent and munificent country North Georgia is? Think of its products—cotton, corn, wheat, rye, potatoes and all other vegetables, red and brown iron ores, manganese, bauxite and other minerals, and, to crown it all, peaches and watermelons!'

Advantages at Reidsville.

C. N. Evans, cashier the Bank of Reidsville, Reidsville, N. C.:

"Reidsville, a little city of 5000 souls, has only one cotton mill—the Edna. This mill is quite a large one, its original size having been doubled. It has every late improvement, and, I am informed, has operated at a good profit since organization. It is employing more than 300 hands, has about fifteen nice tenement-houses, and, altogether, the mill is classed as second largest in the State.

"Labor is quite cheap here. Not infrequently we see able-bodied white men with families employed for fifty cents per day, and younger men and boys can be procured without number at wages even smaller than this. It is an easy matter to procure whole families from the country for factory employment, and this class of labor seem contented and easily controlled. In fact, with Reidsville's experience of twenty years as a manufacturing town (tobacco principally), we have never known a labor strike; on the contrary, the best of feeling between manu-

facturers and their help exists. This county can and would easily furnish plenty of help, and cheaply, for two or three more factories.

"The general effect upon our community by the introduction of cotton manufacturing has been most beneficial. We find our mercantile interests increased, trade is more stable, and every encouragement is given for the protection and promotion of such business. The mill has employed largely a class of people who were unemployed before; that is to say, they had little else to do than attend to a little home work—rather a shifting class. Now they have steady employment and seem satisfied. Labor journals, strike organizers, and even labor organizers, have not troubled this section as yet.

"Undoubtedly the effect of our mill has been good, to the farmers especially; they have a larger market for their product, and many are diversifying their crops, paying more attention to the raising of vegetables, pork, chickens, etc.

"We are situated on the main line of the Southern Railroad; are the highest point between Washington and Atlanta, excepting one; have a very fine natural drainage, good water facilities near, and excellent drinking water. Being immediately in the Piedmont section, we have no hot nights, or mosquitoes; a delightful and steady breeze from the mountains each evening, and a very low rate of mortality. We have paved streets, electric lights, fire department, also a local water-works company just organizing, two banks, many factories for manufacturing, prizing tobacco, a roller mill, two box factories, etc., and a very low tax rate. Reidsville would welcome and encourage any concern which would like to change quarters to a live, active Southern home. We are quite a young town, and will give every encouragement to new enterprises. There are now two good factory buildings that can be had for a cheap rental. As for fuel, quantities of wood of all kinds can be had for \$1.25 to \$2 per cord, delivered at your door, and the high-grade steam coal can be had for about \$3 per ton."

Mills Doing Well.

J. H. McAden, president of the Merchants and Farmers' National Bank, Charlotte, N. C.:

"The cotton mills in our section of the South are doing well now. Last year was the hardest we have had on business, but most of our mills made fair earnings for the year. Our supply of labor is ample, and I believe there is a sufficient supply to draw upon should the number of mills be increased. The general business of the country has been greatly benefited by building cotton mills and giving employment to labor.

"Our labor is contented and happy, earning sufficient wages to live more comfortably than before they were employed in the mills. The kindest feeling exists between the mill-owners and the labor. They have comfortable homes to live in and are promptly paid, and have plenty of cash to purchase what they want; have a cheap market and live on the best quality of food.

"The developing of cotton manufacturing has greatly increased the mercantile business, and has enhanced the value of farming lands within a radius of many miles around each plant. It also has a tendency to diversify farm products. The farmer has a home market for everything he produces. The section of the South known as the Piedmont Belt, extending from Greensboro, N. C., via Charlotte, to Greenville, S. C., has more advantages for manufacturing cotton than any section of the country I know of; good,

healthy climate, good laws, good government and a large area of country to draw upon for any labor we may need for future development.

"As a manufacturer of cotton goods, it affords me pleasure to state that the relation between capital and labor in mills is on the most satisfactory basis in this country. The labor is promptly paid and kindly treated, and in return they give good service and feel a pride and a common interest in the mill with which they are employed."

From a Northerner.

John Siskron, president of the People's Bank, Darlington, S. C.:

"We have a large cotton mill in our town which, besides giving employment to a large number of hands, has increased our population and been otherwise of great benefit to this community. Our cotton receipts are about 15,000 bales. Our mill uses about 5000, leaving a surplus sufficient for two or more mills of equal capacity.

"The supply of labor is abundant. It is drawn from our native white population. It is industrious, reliable and free from labor combinations and strikes. The operatives receive good wages and live with more comfort than elsewhere, because farm products are cheap and the cost of fuel and clothing is less than at the North.

"This is a good place to invest in manufacturing wagons, barrels and other articles of wood, there being an abundant supply of oak, hickory, sweetgum, etc., in the swamps of the Pee Dee river.

"I am a Northern man, having been born and raised in the New England States. I came South about twenty-five years ago with a small capital and started a manufacturing business on a small scale at Darlington. I have been very successful in business. I think there is no section of our country that has advantages equal to those presented by Eastern South Carolina, not only for the successful operation of cotton factories, but also of other industries. There are good schools and churches; the people are cordial and friendly, and the finest climate, take it the year around, in the United States.

"Northern people seeking new homes, a better climate and a safe place for their investments, can find no better section than Eastern South Carolina, where a warm welcome and every kindness will be extended to them by a generous and hospitable people."

A Vital Suggestion.

William E. Ashley, superintendent the North Carolina Car Co., Raleigh, N. C.:

"In the last issue of your valuable journal you published a number of letters from New England people, most of them admitting that the South has advantages for manufacturing cotton goods, but at the same time claiming that these advantages were likely to be only temporary. We are not in the cotton manufacturing business, and it may seem presumptuous on our part to take issue with the views of so many able gentlemen, but it would appear that they have overlooked several important conditions.

"The laboring people of the South belong to two distinct races, who never have united, either socially or politically, and it cannot reasonably be expected that they will ever unite in labor organizations. Should the attempt be made to establish such organizations in this country it will undoubtedly result in rivalry that would prevent them from ever obtaining the power that the compact organizations of New England have been able to exercise.

"In regard to legislation, while we admit that the last national democratic plat-

form incorporated in it some of the populist vagaries, it was not at all acceptable to many of our best people. It should be borne in mind that the bankers and merchants and manufacturers, and nearly all others who are active in the financial and commercial business of this section, are democrats, whose influence in party councils always has had, and undoubtedly will have, more weight than any others in controlling legislation. As an indication of the present sentiment throughout the South, we refer to the fact that several States have amended their constitutions, and others are attempting to do so, for the purpose of allowing exemption from taxation for new manufacturing enterprises.

"A great deal more might be said on this line, but wishing to keep out of politics, I will simply add that, should the fears of your New England correspondents be realized, even in part, it cannot in any way affect our cheap fuel, our good climate, the close proximity of the cotton fields, and last, but not least, the new and improved machinery that would undoubtedly be installed in any new cotton mills that may be built in the South in the future."

Investments Met by Dividends.

George W. Montcastle, president the Bank of Lexington, Lexington, N. C.:

"The cotton mills in operation here have been very successful; in fact, their profits have been so large that I am not at liberty to state the exact figures, but suffice it to say that it did not take but a few years for the dividends to equal the investment. The manufacturing of cotton pays better here than any other industry, and so far is engaged in by only native Southerners, but we would welcome with open arms capitalists from New England and give them every encouragement to locate with us, exempting them from town taxes and showing them every courtesy within our power.

"Our supply of labor is more than adequate for all demands, and in case the number of mills were materially increased, no difficulty would be found to secure operatives, as those now at work are all well contented, earning sufficient wages to live better than previous to their present employment. We have nothing but native laborers, and others, seeing their contentment, desire to enter upon the same occupation, and the mill-owner has a great many more applicants than he can give employment.

"We have found that the development of the cotton manufacturing business has increased mercantile business, enhanced the value of both town and country real estate and given activity to all kinds of trade and industry, so that it is but natural that we would look with a great deal of pleasure on any movement to increase this growing and lucrative industry, and would be glad to welcome some of the far-sighted brothers from New England to our midst, assuring them that they would be received with that far-famed hospitality of which the South is so justly proud."

Thinks There Are Plenty.

Jacob Phinizy, president of the Georgia Railroad Bank, Augusta, Ga.:

"In a general way the mills in this section have been fairly successful within the past few years. In many cases the profits have been largely reduced, and in some cases dividends have been passed. The dividends that have been paid, as a rule, have not been over 6 per cent. The mills in this section have suffered a great deal in the past six months owing to the small demand for goods and the very low prices obtained for the same.

"As to labor, I do not think there is any dearth now, and a sufficiency can be had

for any reasonable increased demand. The retail trade of our community has increased from erection of cotton mills, and also our cotton receipts. You might say the community has been benefited from this industry.

"The operatives seem to be contented, and it is presumed that they are faring better now than they did upon the farms, as most of them come from the country. Cotton manufacturing has, no doubt, increased the volume of mercantile business, but I do not think it has enhanced the value of country property, nor have they in any way been of benefit to the farmer. I cannot add anything more, except to say that I believe that it would be the best thing for cotton manufacturing that could be done not to build any more new mills, or make any more cotton-mill machinery for the next ten years."

In Spite of Depression.

H. J. Brabham, cashier Bamberg Banking Co., Bamberg, S. C.:

"We have but one mill in our county, and that is in our town. It has been in operation about five years, and, taking into consideration the great depression of that period, it has paid fully as well as we could have expected. We have an abundant labor supply, not only for this mill, but for several more. Our chief product (cotton) having declined below the cost of production, many of our farming class gladly turn aside to the cotton-mill manufacture, it being so much more profitable than farming. The last census gave this town about 700 inhabitants. We now have at least 2000. The mill has been the main cause of this rapid increase.

"The operatives are doing far better than they did on their farms, and are cheerful and seem to be contented and happy. The mills have increased in volume the mercantile business and enhanced the value of property all around us. The condition of the farmers in the neighborhood has been improved from the fact that they raise provisions to sell to the operatives at a profit, whereas, if the mills were not in reach, they would raise cotton at a loss."

Causes of Failure.

T. E. Blanchard, president the Fourth National Bank of Columbus, Ga.:

"Some of the cotton mills in this city have not prospered for the past few years, but others have, and an investigation will, no doubt, fully demonstrate that failure is due entirely to mismanagement. Those mills that have been properly managed show satisfactory returns. The labor supply is ample, and the reserve is sufficient for largely increased operations.

"The effect upon our city is marked. The money paid out to the operatives is spent here, thus fostering both the retail and wholesale trade. Operatives are earning a good living. The prudent ones are saving money, and in many cases own their own homes.

"The development of cotton manufacture has increased the population, thereby increasing real estate values not only in the city, but the surrounding country, as this population has to be fed, and the dairyman and truck farmer find a market for their product.

"No better location than this city for cotton manufacturing can be found in the South—healthy, good schools, good climate, cheap living and ample labor."

Good Returns Made.

M. P. Jordan, president Commercial Bank, Danville, Va.:

"My personal knowledge of cotton manufacturing in the South is small, being limited almost entirely to observations of the operations of the Riverside Mills

at this place. These mills began business in 1883, with a capital stock of \$50,000, and today have \$2,000,000, \$1,000,000 of which is preferred stock, and pays and has paid a regular semi-annual dividend of 5 per cent.; while the other \$1,000,000 is common stock, and has paid an average semi-annual dividend of 4 per cent. Some of this common stock sold on the streets today at 100 cents on the dollar. These figures would seem to indicate that so far as this section of the South is concerned the business is fairly profitable.

"There is an abundance of cheap labor, possibly green and unskilled at present, but with sufficient intelligence to soon learn the business. I think the establishment of the Riverside Mills has materially increased and strengthened the mercantile interests of our city, as well as helped in many other ways to benefit our community. I would also mention the fact that these mills are located in our city limits and derive their power from the Dan river, which has a fall of eighteen or twenty feet at this point. About three miles above the city the river has a fall of twenty-three feet. This power is entirely undeveloped, though I have no doubt that easy and satisfactory terms could be made with the owners for its development. There are already good and well-graded roads leading to the falls. Danville is a city of about 20,000 people."

More Labor Needed.

A. G. Campbell, president of the First Natchez Bank, Natchez, Miss.:

"We see no reason why cotton mills in this section, with the latest improved machinery and good, experienced management, should not pay a reasonable dividend on the investment. The labor supply is not sufficient, owing, no doubt, to the very few mills in Mississippi, but we believe as the mills increase that this deficiency would be overcome. Where these mills are located they add very materially to the business of that section, and naturally give employment to the working classes and influence them to become better citizens. Operatives are generally earning fair wages, and because of the cheaper cost of living in the South over other sections, they live more comfortably. The establishment of the cotton manufactures in the South has increased the local business very materially in their respective localities, and the small farmers are enabled to get a more ready market for their products.

"We are very much of the opinion that the location of the cotton mills near the cotton fields will greatly reduce the cost of manufacture and increase the dividends of these institutions.

"We invite Eastern manufacturers who are looking toward the South for the purpose of locating their mills to investigate this section."

Alabama Coal for Warships.

A dispatch from Birmingham, Ala., states that the Tennessee Coal, Iron & Railroad Co. has made arrangements to supply several United States warships with Alabama coal. It is reported that a Northern firm is arranging to furnish 250,000 tons to the government. It will probably obtain most of the fuel from the Alabama district, which will be sent to Key West, Pensacola and probably Mobile for the ships.

The Florida Times-Union and Citizen has just issued a special edition giving a complete and most comprehensive review of the resources and development of the four cardinal sections of the State. The publication is highly illustrated with half-tone cuts of prominent places and resorts, and the whole work is one of an unusually artistic character.

A LESSON FOR THE SOUTH.

The Value to This Section of What a Few Capitalists Have Done.

Mr. William C. Seddon, a leading banker and broker of Baltimore, of the well-known Virginia family of that name, intimately identified with Southern interests, who has recently returned from a trip to the east coast of Florida, is enthusiastic as to the wonders that have been wrought in that section by Mr. H. M. Flagler. Mr. Seddon regards the great railroad development and the investment of many millions of dollars in hotels, which have united to transform that region from a wilderness, as an illustration of the value to the South of making strong friends of the great capitalists of the country. "No man in the South," says Mr. Seddon, "in fact, no combination of Southern men, could afford to undertake such a daring venture as Mr. Flagler's. It has cost many millions of dollars, and has added vastly to the prosperity of Florida, but it will probably be many years before Mr. Flagler can hope to secure any profits from his investment. But for him this great development, involving the construction of ten hotels, some of them probably the most perfect in all their appointments in the world, and the building of a 366-mile railroad, without the issuing of a bond upon it, would probably never have been undertaken. Mr. Flagler has, therefore, done more than make two blades of grass grow where only one grew before; he has made many grow where none had ever before grown. It is difficult to overstate the importance of what he has accomplished. His work is an object-lesson that should cause the people of the whole South to realize the importance of making friends with the men who control the millions of idle money always seeking investment.

"It would," said Mr. Seddon, "be useless to attempt to describe the magnificence of the Hotel Royal Poinciana, at Palm Beach, and the grounds that surround it. All that one might imagine of tropical beauty, of palms and flowers, of magnificent grounds covering many acres, brilliantly illuminated by electric lights artistically arranged among the palm trees, is more than fulfilled by this reality. Mr. Flagler, who spends his winters there, is an object of general interest. It is worth noting that he is universally loved by all the thousands of laborers employed in his hotels and on his 366-mile railroad. I found that these people were enthusiastic in praise of him. Here is a man, who with the millions at his command, has chosen to spend of his own money probably \$10,000,000 or more in opening up to the world this beautiful region, adding to the wealth of the State, creating possibilities of enjoyment and health for winter tourists and health-seekers, giving employment to many thousands of hands, and is at the same time thoughtful and attentive to the needs of all his employees. What Mr. Flagler has done for the east coast of Florida, Mr. Plant for the Gulf coast, Mr. Vanderbilt for the Asheville region of Western Carolina, are illustrations of the power for good to the South of aggregated wealth. With its wealth swept away by the war, it must be many years, possibly a generation or more, before the South itself can accumulate sufficient surplus wealth to carry out such vast enterprises as these. Without securing outside men and money this generation of Southern people would pass away entirely before they could secure any benefits from such undertakings. For the good of those of us who hope to see the whole South prosperous, as well as for the good of the

young people now growing up, it behooves the South to give the most hearty welcome—not in words only, but in legislation also—to every man who wants to come into this section, whether his investment be only muscle and brain, or whether it be almost unnumbered millions, like Mr. Flagler, Mr. Plant, Mr. Vanderbilt, Mr. Huntington and others have placed in the South."

Good Work for the South.

[Waco (Texas) Cotton Ginner's Journal.]

We have had occasion more than once to refer to the helpful character of the work the Manufacturers' Record, of Baltimore, has done and does for the South. Just now the Manufacturers' Record is engaged in an undertaking that merits hearty commendation and appreciation. Once a week a copy is sent, current issues, to the manager or treasurer of every cotton mill in the New England States and to capitalists or promoters in the East who are known to be interested in or identified with the cotton-spinning industry. The Manufacturers' Record announces that it will send these copies once a week for three full months. The value of this work, a propaganda in its way, must be immense. There was never a time in the history of this country when Southern people were as desirous to acquire cotton mills as now—never a time when New England appreciated, as now, that mills may be operated more profitably in the Cotton States than in the East. Our people have reached that stage where they are willing to put their money in mills, instead of, as heretofore, waiting for the Eastern capitalist to build and operate spinners. Seeing this disposition, seeing that the Southern mills are dividend earners, and creators of surplus as well, Eastern capital looks with friendly eye toward the South. The Manufacturers' Record, in its weekly visits to the Eastern mill men and capitalists, will do practically helpful work for the South, paving the way for and inducing investments. It will let the East know that the South is at last ready and anxious to do its full part in this economic and industrial development. We do not doubt but that before a year has gone by there will be several additional spinners in Southern States the direct result of this movement now undertaken by the Manufacturers' Record. So, believing and recognizing its friendliness to the cotton-growing section, we beg to assure that journal that the representative element of society in the Cotton States will have hearty appreciation of its attitude and efforts.

The Wilmington Tariff Association, intended to look after matters of transportation, has been incorporated in North Carolina by Messrs. J. Allen Taylor, Marcus W. Jacobi, C. W. Worth, John A. Arringdale and Charles E. Borden.

A committee representing the commercial interests of Norfolk and Portsmouth, Va., have been in Washington this week to protest against the proposed consolidation of these cities with Newport News, Va., in one customs district.

The American Ginner and Cotton Reporting Agency has been formed at Meridian, Miss., by A. J. Dossett, L. A. Duncan and others. The corporation proposes to publish information relative to cotton.

The general assembly of Virginia, which adjourned last week, provided for the establishment of a bureau of labor and industrial statistics.

If you wish to keep posted on the progress of the South, read the Manufacturers' Record. Price \$4.00 a year.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

OCEAN AND RAILROAD.

Mr. Stuyvesant Fish Discusses Their Union for Commerce.

Mr. Stuyvesant Fish, president of the Illinois Central Railroad, has been in New Orleans with a party of Chicago capitalists inspecting the terminal facilities of the port. To a reporter of the Times-Democrat Mr. Fish said:

"The problem before us is to minimize the cost of joining the rail and ocean transportation. If New Orleans can do this successfully, she will be master of the situation and the monarch of the export business of the United States. This question of cutting down the cost in getting the products of this country on ship-board is the thing that bothers every shipper in the country, and the question involved in every important railroad deal of recent days. That is what the Illinois Central is working for. This city has the natural facilities for minimizing that cost, and from a natural standpoint it has a great many advantages over the Eastern ports. Thus it stands in hand for the city and those in authority to do everything in their power to encourage and further the development of these natural advantages. We believe that a great step has been taken in the establishment of the Stuyvesant docks."

He announced that a number of improvements would be made this year at the New Orleans and among them distribution yards. He has found the road prospering with the South. He said:

"The South is getting rich on five-cent cotton. We do a good deal of blustering about, and talk hard times, but there are evident signs of prosperity, and I have found them all down the line of the Illinois Central Railroad. When I say the South is getting rich on five-cent cotton, I do not mean to say that such a price seems a great sacrifice, but I mean to say that the South is far richer today than it was twelve months ago. The Louisiana sugar planters have made money this year, and I understand good money. The lumber men of this State are making money right along."

THE NICARAGUA CANAL.

Fair Prospect of the Work Being Completed.

It is announced that a syndicate is forming in Chicago to construct upon business principles the Nicaragua canal. The estimated cost is within \$75,000,000, and specifications for contractors will be ready in a short time. Mr. L. E. Cooley, who has been associated as engineer with Mr. E. F. Cragin, is preparing for the enterprise, and is quoted as follows:

"The Nicaraguan canal is being treated as a business proposition. The construction of the Illinois drainage canal has educated the contractors who did that work, and they know just what to expect on the Nicaragua canal. Their representatives have been over the ground, every foot of it; they have studied climatical conditions, learned what their labor would cost, can estimate closely the cost of transportation to the canal of their machinery and material. With the specifications in their hands, they can bid as intelligently as if the work was in an American State."

The news that the canal is likely to be built is of special importance to the South. The ports of that section will be the first to feel the good effects of the enterprise, and the extension of commerce

will mean development in many other lines.

TRADE WITH THE BALTIC.

Effect of an Inquiry in the Manufacturers' Record.

In a letter to the Manufacturers' Record Charles Earl Currie, royal Danish vice-consul at Louisville, Ky., says:

"As an illustration of the good work you are accomplishing for your patrons, the writer wishes to state that a few months ago he made an inquiry through your columns in behalf of Messrs. Dahl Bros., of Copenhagen, Denmark, who wished to secure prices on wrought-iron pipe. Your publication of this inquiry resulted in a number of American manufacturers taking the matter up at once, and in a short time Messrs. Dahl Bros. placed a trial order for 400 tons, the order going to one of the American manufacturers. This order, the writer is informed, represents only a portion of the business which will be done with the Copenhagen firm on this one commodity alone.

"This deal shows most conclusively the practicability of selling American products in Denmark and on the Baltic, and fully sustains the Manufacturers' Record in its frequent allusions to this important subject. * * * The same firm which made the 400-ton purchase of wrought-iron pipe, viz., Messrs. Dahl Bros., Copenhagen, Denmark, is now in the market for a supply of cast-iron pipe, and desires to enter into correspondence with American manufacturers who are willing to alter their patterns and make them a proposition. Every manufacturer of cast-iron pipe who is desirous of extending his business would do well to write Messrs. Dahl Bros. at once for full details as to sizes, lengths, patterns, etc. Their letters will receive prompt attention. It should be remembered that all correspondence with the Baltic trade is conducted in the English language."

Loading for Japan.

The steamship Indrani, already referred to in the Manufacturers' Record as loading cargo at Southern ports direct for Japan, has completed the work and sailed from New Orleans, her entire cargo being made up as follows: From Mobile to Yokohama, 3200 bales of cotton; from Mobile to Kobe, 600 bales of cotton and 3800 tons of pig iron; from New Orleans to Yokohama, 2750 bales of cotton; from New Orleans to Kobe, 5950 bales of cotton, making a total cargo of 12,500 bales of cotton and 3800 tons of pig iron. The Indrani will go direct from New Orleans to Japan via the Suez canal, and it is expected to make the trip in about sixty days. Other shipments of cotton and pig iron will follow according to the demand, which at the present time is large, and there is every reason to believe from present indications that there will be an extensive permanent business established in these products with Japan.

The representative of the company at New Orleans, Mr. W. J. Hanin, states that another vessel is expected to load for the East about March 25. The steamships are under the management of the China-Japan Trading Co., which has extended its operation from New York to Southern ports.

Another vessel, also destined for Japan, has been loading at Mobile. This is the Oak Branch, whose cargo consists of steel rails, cotton, pig iron and structural iron.

The steamship Kilbourn, which recently cleared from Galveston for Japan, carried the first cargo of cotton ever sent

direct to that country from the Texas city. The cargo consisted of 8350 bales, of which 2500 will be unloaded at Nagasaki and the balance at Kobe. The route is by way of the Mediterranean sea and Suez canal.

Charleston's Increasing Commerce.

Reports from Charleston, S. C., for the period between September 1, 1897, and February 15 of this year show that its commerce was nearly as large as for the fiscal year ending June 30 last. The total value of the exports were \$9,900,000. They consisted of cotton, wheat, iron, flour, rosin and corn, besides miscellaneous articles. It is noticeable that about 14,000 tons of iron were exported. The Charleston Transport Line, of which Messrs. Simpson, Spence & Young, of New York, are the general agents, and Messrs. Street Bros., the Charleston managers, has already sent out thirty-one ships loaded with cotton, grain, flour, iron, lumber, etc. There are several ships yet to be loaded, and the indications are that exports may continue throughout the year.

The Port Arthur Canal.

A dispatch from Kansas City, Mo., states that the injunction to prevent constructing the ship canal connecting Port Arthur, Texas, with deepwater has been dissolved. These proceedings have delayed the completion of the canal, by which ocean steamships will be able to land directly at the Port Arthur docks. It is understood that the work of excavation will be resumed at once, with the view of completing the canal as soon as possible. This will allow the Kansas City, Pittsburg & Gulf Railroad Co. to load vessels directly at the terminus of the line without the extra expense and delay of lightering.

New Galveston Line.

It is announced that arrangements have been made for a direct steamship service between Galveston and Rotterdam, Holland. About three ships will be used at first, the fleet to be increased as business demands. Sailings will average about one every three weeks, and it is expected to continue the service throughout the year. Messrs. William Parr & Co., of Galveston, will represent the line.

Jottings at the Ports.

James Graham, Jr., has been appointed agent for Messrs. Simpson, Spence & Young, shipping agents, in charge of the Galveston business of this firm.

The Washington & Norfolk Steamboat Co., of Washington, has elected the following officers: Levi Woodbury, president; C. F. Norment, vice-president; R. F. Baker, secretary and treasurer; John Callahan, general manager.

The export business between Mobile and Mexico is steadily increasing, and the steamships are carrying passengers as well as freight. The cargo of one vessel which recently left for Tampico included hardware, woodenware, dry goods and lumber.

An export material of considerable importance in the South is a preparation used for immersing sheep to free them from insects and keep them in a healthy condition. It is known as "sheep dip," and is manufactured in its dry state and shipped in bags. A recent consignment of 1000 bags from Richmond, Va., arrived in New York for export to Chili, South America.

The Mobile & Birmingham Railroad Co. has appointed Forrester Tuttle as its agent in Mobile, succeeding J. S. Taylor, who has resigned.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW NORTH AND SOUTH SYSTEM.

Kansas City, Pittsburg & Gulf and Minneapolis & St. Louis May Combine—K. C., P. & G. in Arkansas.

According to a New York dispatch, negotiations for a close traffic alliance between the Minneapolis & St. Louis and the Kansas City, Pittsburg & Gulf have been practically concluded. The Minneapolis & St. Louis extends from Minneapolis to Des Moines, and the Keokuk & Western from Des Moines to Pattonsburg. The latter road has close connections with the Kansas City, Pittsburg & Gulf, and by building about thirty miles of road it would be practicable to run through cars from Minneapolis to Port Arthur, on the Gulf. The united mileage of the systems thus working together is about 2000 miles. A corporate merger of the roads in question, it is said, has been considered. If effected, it will mean the establishment of a north and south system in the Mississippi valley second only in importance to the Illinois Central.

A dispatch from Little Rock states that the Kansas City, Pittsburg & Gulf Railroad may secure control of the Little Rock, Hot Springs & Texas road. As readers of the Manufacturers' Record are aware, an effort is being made to sell this line through the courts. It is reported that representatives of the Kansas City, Pittsburg & Gulf have made the receivers an offer for the line as it stands. It is graded between Benton and Hot Springs, Ark., and about three miles of track have been laid on the right of way. The road was projected to be built between Little Rock and Hot Springs, and its acquirement by the Gulf system would give the latter an entrance into the heart of the State and a connection with the principal cities.

Possible Norfolk & Western Connection

A correspondent of the Manufacturers' Record, writing from Rutledge, Tenn., relative to the sale of the Morristown & Cumberland Gap Railroad to Adolph Segal, of Philadelphia, says:

"It is now thought the road will be extended to Knoxville, Tenn., and to Bristol, Tenn. If done, it would become one of the most important lines in the South, as it traverses one of the finest farming sections in the South; beside, it has the finest marble of any section in the United States, besides large beds of iron ore."

In this connection it may be said that if the line is extended to Bristol, Tenn., also connected with the Louisville & Southeastern Railroad, already referred to in the Manufacturers' Record, it would make a very valuable connection for the Norfolk & Western system. It is understood other Philadelphians are interested with Mr. Segal in the line referred to, and as Philadelphia capital is invested in the Norfolk & Western, there is a possibility that Mr. Segal and his associates may be working in the interest of that system.

To Reach a Productive Region.

The Norfolk, Virginia Beach & Southern Railroad Co., at its annual meeting in Norfolk, re-elected its present board of directors, which includes Alfred Skitt, the president of the company; John Carstensen, Percy R. Todd, Charles R. Cox, George R. Turnbull and William White. The Manufacturers' Record has al-

ready referred in detail to the many improvements which have been made by the present owners of this line. They include rebuilding of the track and changing it to standard gauge; also the construction of a new depot at Norfolk, and other additional facilities for passenger and freight traffic. The branch of the line to Munden Point, on tidewater, is being completed as rapidly as possible, and already the track has been laid for a considerable portion of this distance. At the terminus a line of steamers will be operated to the principal tidewater towns in Currituck county, North Carolina, as well as on Albemarle and Pamlico sounds. The branch will pass through a very productive country, which also contains extensive tracts of timber land. At Munden Point wharves, warehouses and other facilities will be constructed. It is understood that the company intends making special efforts to interest settlers and industrial promoters in the part of the country which it traverses, and that arrangements are now being made to locate several colonies.

Electric Lines in Western Maryland.

The western portion of Maryland is the scene of considerable activity in electric railroad building at present. Companies have recently been incorporated at Cumberland, Md., to build a line from Cumberland to Frostburg, a distance of twelve miles; also from Frostburg to Lonaconing and Westernport. The same parties are interested in these lines, which represent about thirty miles of road. Among the promoters are J. W. Burchinal, of Moundsville, W. Va., who took an active part in building the electric line between Benwood and Moundsville, in that State. Others interested are Walter Powell, of Cumberland, Md.; Hugh Scott, of Lonaconing, and Marks Wineland, of Frostburg.

The Manufacturers' Record has already referred to the formation of the Blue Ridge Electric Co. to build about ten miles of line to Pen-Mar, Monterey and other resorts in the Blue Ridge mountains. This company is composed principally of Baltimore parties, and includes Simon P. Schott, cashier of the American National Bank, and others.

In a letter to the Manufacturers' Record, Mr. John W. Burchinal, of Moundsville, W. Va., one of the principal promoters of the Cumberland and Westernport lines, states that the companies expect to be in readiness to let contracts about April 1. It is intended to build but one power-house, to have equipment for supplying 1500 horse-power.

Sale of Waycross Air Line.

A dispatch from Waycross, Ga., is to the effect that Messrs. J. S. Bailey & Co. are interested in a syndicate which has purchased the Waycross Railroad, extending from Waycross to Nichols, Ga. It is the intention of the purchasers to extend it from Waycross to Douglas, making it forty-two miles in length. The route extends through a territory which produces a large amount of naval stores. Nichols is also the center of a large lumber interest. Messrs. Bailey & Co., whose headquarters are at Douglas, control several tracts of timber lands.

Chance to Build a Railroad.

In a letter to the Manufacturers' Record, R. A. Shotwell, one of the promoters of a proposed railroad between Monroe and Natchitoches, La., states that the Monroe Railroad & Construction Co., which has been formed to build the road, has already secured franchises to the value of \$400,000. The line will be

eighty-five miles in length, and these franchises will be transferred to responsible parties to do the work. Bids are invited.

Testing Electric Headlights.

The Seaboard Air Line is making tests of electric headlights, and several of its passenger locomotives are now equipped with this light. The electric motor which furnishes the light is fastened on the engine between the smokestack and the headlight, and it is operated from the cab. It is fed by a three-quarter-inch steam pipe from the boiler, and the equipment of the motor consists of an engine and dynamo. It occupies a space of 15x27 inches. The motor generates one horse-power, and this electricity is used in the headlight and in furnishing incandescent lights for the cab. The headlight can be regulated from 100 to 4000 candle-power. On a straight track the engineer can see the tracks clearly for a distance of three-quarters of a mile, whereas the regulation oil lamp casts a light only the distance of about two telegraph poles, or one-fifteenth of a mile.

B. & O. Reorganization.

A bill has been introduced in the Maryland legislature for another charter for the Baltimore & Ohio Railroad. The list of incorporators include Alexander Brown, John Gill, president of the Mercantile Trust Co.; William F. Frick, Edwin Warfield, James Bond, J. McKenney White and Thomas J. Hayward, of Baltimore; Louis Fitzgerald, Henry Bridge, Eugene Delano and Edward R. Bacon, of New York, and George H. Earle, Jr., of Philadelphia. The incorporators referred to include several of the principal bankers of Baltimore; also representatives of a number of New York financial institutions. It is understood that the charter is a step taken in favor of the retention of the present management when the road is reorganized, and that the interests of Messrs. J. P. Morgan & Co. are not represented by those named in it.

Gulf & Interstate Terminals.

The Gulf & Interstate Railway Co. is preparing to increase its terminal facilities at Bolivar Point, opposite Galveston, on Galveston bay. To this end the Bolivar Channel & Dock Co. has been formed, with \$100,000 capital, to construct wharves, terminal tracks, also to carry out the necessary improvements to obtain deep water. It is understood that L. P. Featherstone, general manager of the Gulf & Interstate Railway, is back of the new enterprise. It has been reported that this line might be utilized by the Kansas City, Pittsburg & Gulf for an extension to Galveston. In case such a plan is carried out, the terminus of the road at Bolivar Point would be the location of another seaport town, and greatly add to the importance of Galveston harbor as an exporting point.

New Railways in Alabama.

The activity in railroad building in Alabama has been referred to recently in several issues of the Manufacturers' Record. The Mobile & Ohio is building 200 miles of road; the Plant system is completing its branch from Newton to Elba; the Southern Railroad, which is now in possession of the former Memphis & Charleston, now the Memphis-Chattanooga division, is building some important branches in North Alabama; the Chattanooga Southern will probably extend its line from Gadsden to Montgomery; work has begun on the Atlanta & Alabama; as to the Montgomery,

Haynesville & Camden Railroad, there is no doubt that its building is only a question of a short time.

Important Mexican Contract.

According to a dispatch from New York, President Almeric H. Paget, of the Chihuahua & Pacific Railroad Co. of Mexico, has signed a contract with the Nassau Construction Co. of that city for the construction of a steam railroad in Mexico to the silver-mining regions of that section. The total distance from Chihuahua to the Gulf of California is 350 miles. Under the terms of the contract one-third of the roadbed is to be ready for operation by November 1. It is expected that the entire road will be completed within the next eighteen months. The chief owners of the railroad are Moore & Schley, New York, and Mr. Paget and his friends.

Railroad Notes.

The Charleston & Western Carolina Railroad Co. is now receiving several engines on its contract with the Baldwin Locomotive Works. Ten of these were ordered for the passenger and freight business of the line.

The Richmond & Petersburg and the Petersburg railroad companies, which form sections of the Atlantic Coast Line, have been consolidated by a special act of the legislature under the title of the Atlantic Coast Line Co.

C. B. Wilburn has been appointed receiver of the Rome & Carrollton Railroad Co. upon the petition of the Farmers' Loan & Trust Co. of New York. This is a portion of the Chattanooga, Rome & Southern Railroad.

The Baltimore & Ohio has purchased 10,000 tons of 80-pound steel rails for the lines west of the Ohio river. About 15,000 tons of the 40,000 bought last summer for the main line will be placed in the tracks this spring, giving the B. & O. new rail from the Ohio river to tidewater.

The Lynchburg Street Railway Co. has been sold to Walter S. Johnston and C. Smith, of New York, who are representing the bondholders of the company. The line is about five and a-half miles in length, and it is reported that the new owners will make a number of improvements to it.

Richard Carroll has been appointed general manager of the Mobile & Ohio Railroad. Mr. Carroll was formerly general manager of the Alabama Great Southern Railroad, and for a number of years general superintendent of the Queen & Crescent system. His office will be at Mobile.

The Plant system has added another line to its combination in the Walterboro & Western Railroad. This line extends in South Carolina between Walterboro and Ehrhardt, and is twenty-seven miles in length. It was originally built as a private road to open up timber tracts, and was extended later and operated with a view of obtaining a freight and passenger business. It connects with the Plant system at Walterboro.

The annual meeting of the Gulf, Colorado & Santa Fe Railroad Co. resulted in the re-election of the following officers: Aldace F. Walker, chairman of board, New York; Edward P. Ripley, president, Chicago; George Sealy, vice-president, Galveston; A. C. Torbert, secretary, treasurer and transfer agent, Galveston; Victor Morawetz, general counsel, New York; E. D. Kenna, general solicitor, Chicago; H. C. Whitehead, general auditor, Chicago; John P. Whitehead, comptroller, New York.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

BONDED COTTON WAREHOUSE.

One in Columbia, S. C., Doing a Profitable Business.

In a letter to the Manufacturers' Record Mr. W. A. Clark, president of the Carolina National Bank of Columbia, S. C., gives an interesting account of the "useful and profitable business" done by a bonded cotton warehouse in that city. Col. Willie Jones, the cashier of the Carolina National Bank, is the president of the company, and Mr. Charles O. Little is the general manager. Mr. Clark writes:

"In your editorial comments of your last issue on the subject of bonded warehouses for the storage of cotton, you say: 'One has already been established in Charlotte, N. C., and a company is being organized to build another in South Carolina.' In the same issue Mr. Wade A. Harris, your Charlotte correspondent, says: 'The Charlotte Bonded Warehouse Co., which has begun business in this city, is the pioneer institution of its kind in the South.' In this latter statement your correspondent is in error, since we have had one such warehouse doing business in this city for the past two seasons.

"In March, 1896, the general assembly of this State passed an act entitled 'an act relating to warehousemen, authorizing them to give bonds and issue warehouse receipts secured thereby, and prescribing and regulating their powers and duties.' By the second section of that act it was prescribed that 'every person or corporation so authorized under the preceding section to become a public warehouseman shall give bond to an amount based on the estimated value said warehouseman will provide storage for, to the clerk of the Court of Common Pleas of the county wherein is situated the warehouse of said public warehouseman, with sufficient sureties, to be approved by the said clerk of the court, for the faithful performance of the duties of a public warehouseman.'

"In November, 1896, a number of the leading business men of this city organized 'The Mercantile Warehouse,' with a capital stock of \$20,000, and under the terms of the act above referred to filed with the clerk of the court for Richland county its bond, underwritten by the Fidelity & Casualty Co. of New York, one of the strongest surety companies in America. This company then erected a warehouse most modern in all its appointments, and though it is now only in its second year, the demands upon it for storage have been so great that already steps have been taken to so enlarge it as to double its capacity.

"The purposes of the bonded warehouse are twofold—first, to afford security to the customer, and, second, to issue such receipt as will constitute a good collateral for the purposes of borrowing money in any market, and so enjoy the advantage of the lowest rate of interest. We herewith send you a copy of the warehouse receipt issued by this company. The plan of operation is very well set forth by your Charlotte correspondent. This class of warehouse

affords a good opportunity not only to the planter to hold his crop, but affords to the cotton mills a most convenient and efficient method of storing and carrying its cotton supply. The growth of the cotton-mill industry in this community has been such as to render this feature one of prime importance. The volume of cotton to be stored for spring and summer consumption is already so large that the interest rate becomes a matter of vital importance, and hence the need of having a collateral which can be used where money can be borrowed at less rates than prevail with our Southern banks. For this purpose we must use the surplus funds of the money centers, and so we must have the bond of a company of national reputation. In this the wisdom of the officers of the Mercantile Warehouse has been justified, for when the plan was submitted to the officers of the National Bank of the Republic of New York, they at once pronounced it good, and have cheerfully furnished both the Richland Cotton Mills and the Granby Cotton Mills of this city money at 6 per cent. for carrying their cotton upon the receipt of this warehouse company."

In conclusion Mr. Clark says:

"The bonded warehouse for the cotton crop is already an established success, and in the hope expressed by you that 'nothing will develop to lessen the present promise of benefits to the South,' you will not be disappointed."

Cotton for Six Months.

In a report of February 28 Secretary Henry G. Hester gives a summary of the movement of cotton during the first six months of the present season. The amount of the crop brought into sight was 9,520,268 bales, an increase over the same period last season of 1,908,171. Exports were 5,404,009 bales, an increase of 730,218. Northern mill takings, 1,802,914 bales, an increase of 452,075; Southern mill takings, 686,696 bales, an increase of 33,029 bales. During the first half of the year the exports to Great Britain had fallen off, but, according to the report for the period ended March 4, they show a gain of 32,797 bales. For the same period the amount of cotton brought into sight was 9,634,614 bales, an increase of 1,955,797. The total exports were 5,568,069, an increase of 841,123 bales. Northern mill takings, 1,839,472, an increase of 461,974 bales, and Southern mill takings, 704,983, an increase of 34,029 bales.

A 5000-Spindle Mill.

The Beaver Dam Cotton Mills, of McColl, S. C., has been organized by Messrs. F. P. Tatum, J. B. Pipkins, A. W. Morrison, T. E. Gibson and Charles Iccman to build a cotton mill. This company was originally projected more than a year ago, but was allowed to lapse until now, and the promoters state that the plant will be established immediately. A new building will be erected and 5000 spindles and complement installed for the manufacture of 26s to 40s fine twist and warp yarns. Charles Iccman will superintend the plant. Power for running the machinery will be obtained from the McColl Manufacturing Co. (cotton mill), of which the organizers of the new company are owners.

A \$75,000 Mill at Fountain Inn, S. C.

The proposed cotton mill at Fountain Inn, S. C., will be erected, the company having fully organized and matured its plans for the enterprise. The organizers include Messrs. J. W. Shell, H. L. Shaw, J. A. Cannon, A. S. Peden and J. W.

Givens, the latter being the leader in the company. It is proposed to build a mill for the manufacture of yarns, putting in from 3000 to 6000 spindles and expending on the establishment of the mill from \$50,000 to \$75,000. Bids on the equipment are now being considered.

Textile School at Clemson.

It is announced that the board of trustees of Clemson College, South Carolina, will appropriate \$12,500 for a textile school to be opened next September, if possible.

Textile Notes.

A cotton mill at Kearney, Neb., employs 250 operatives.

Some of the mills in Maine and Rhode Island are beginning to operate again after the strike against a reduction of wages.

Mr. T. J. Killebrew, of Newton, Ala., manufacturer of jeans and cotton warps, has put in machinery for the manufacture of clothing. Mr. Killebrew will use the cloth produced by his mill.

It is stated that Mr. J. Haydock, the owner of a large cotton mill located in New England, has been investigating at Richmond, Va., with a view of erecting a cotton mill in that city. Mr. Haydock is registered at the Hotel Jefferson, in Richmond.

The movement for a cotton mill at Acworth, Ga., will probably be successful, as nearly all of the \$50,000 proposed capital has been subscribed. Mr. E. W. Lemon is the prime mover in the enterprise, and he is obtaining data, estimates on machinery, etc.

The incorporators of the Nantucket Cotton Mills, of Spray, N. C., reported last week as chartered, are Hal M. Worth, of Worthville, N. C.; C. C. McAlister, of Asheboro, N. C., and J. S. McAlister, of Worthville, N. C. The last named is to be secretary-treasurer of the new enterprise.

The cotton mills of the Eagle & Phoenix Manufacturing Co., at Columbus, Ga., will be sold June 7, according to a decree signed last week by Judge Newman. Commissioner J. W. Murphy will sell the property. The upset price is fixed at \$500,000. The plant is worth over twice that amount.

The Smitherman Cotton Mills, of Troy, N. C., noted last week as incorporated, has a capital stock of \$50,000 and a capacity of 5000 spindles and 200 looms. It is only proposed to place half the machinery now. The cards and spindles are being started, and will be operated day and night on yarns for a while, letting the looms stand. Fifty or sixty hands will be employed.

Mr. D. L. Rosenau, of Northport, Ala., who purchased the Cottondale Mills, of Tuscaloosa, Ala., at a recent sale, has formed a new company to put the plant in operation. The company has been incorporated as the Tuscaloosa Mills, with capital stock of \$60,000, all paid in, and will manufacture cheap grades of cotton cloth. The machinery equipment now in place consists of 12,000 spindles and 300 looms, to which some needed improvements will be made, and new machinery will also be installed. The incorporators of the new company are D. L. Rosenau, of Northport, Ala.; M. D. Rosenau, of Tuscaloosa, Ala.; J. Pollock and E. E. Bernheimer, of Mobile, Ala.; Louis and Joseph Black, of Cleveland, Ohio, and H. P. Loveman, of New York. Mr. Pollock was chosen president; Louis Black, vice-president, and D. L. Rosenau, secretary-treasurer.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Export Cottonseed Cake.

Mr. C. D. Hage, of the Copenhagen Free Port, writes that there is considerable complaint regarding the manner in which American exporters pack their cottonseed cake. These packages, it is stated, vary in weight from 200 pounds to nearly 300 pounds. It is suggested that a package of a uniform gross weight of 100 kilo would be most convenient, because the freight cars of Denmark have a fixed carrying capacity, and a given number of 100-kilo bags would load the car to its capacity.

The Market for Cottonseed Products.

New York, N. Y., March 8.

The cotton-oil market is slow, with buyers and sellers apart in their views. The export trade is very dull, although at a reduction from asking prices active trading would promptly follow. It must be conceded that notwithstanding the prevailing dullness, the position of cotton oil is a promising one. With a strong and advancing lard market, together with the fact that cotton oil is relatively lower in price, an improvement in the latter is practically assured. Chicago lard, July delivery, is quoted at 5.22½ cents. Tallow is steady at 3½ to 3 11-16 cents. Not a few of the cotton-oil men at this market expect to see refined run up to 30 cents, basing their views on the position of lard. Compound lard is in better demand at the improved price, and considerable crude has found its way to the refiners from the mills. Arrivals are plentiful, but this does not indicate urgency to sell; on the contrary, no pressure in this respect is apparent. With regard to compound lard, considerable activity prevails in the West for domestic consumption, the demand largely increasing as lard advances. Packers and refiners are willing to pay ½c. advance over current prices on contracts ahead, but as the remaining quantity of the crop of oil will undoubtedly find a ready sale at higher prices, producers decline to come to terms. The higher grades of oil are meeting a poor demand, in part owing to the higher prices. The latter are in better supply at this point than crude, which is also offered sparingly at the South. Today a few tanks of crude were sold at 20½ cents, and a few tanks crude at 16½ cents, Atlantic coast, 17 cents valley, making 20 to 25 cents for the week. Eight hundred barrels winter yellow here sold at 27½ to 28 cents. It looks as if lard has gone up to stay, as not for three years has the market been in so strong a position, and notwithstanding the prices herewith appended, there is very little on offer on the same basis: Crude, 20½ to 21 cents; crude, loose f. o. b. mills, 16 to 17½ cents; summer yellow, prime, 23 to 23½ cents; summer off-grade, nominal; yellow, butter grades, 27½ to 29 cents; winter yellow, 28 to 29 cents; salad oil, 29 to 30 cents, and soap stock, ½c. to ¾c. per pound. Liverpool refined oil is dull, but firm at 15s. 6d.

Cake and Meal.—There is nothing new to report further than that exports have been heavy and that stocks are pretty well cleaned up in the interior. Prices are unchanged. Meal is in good request for domestic consumption at \$19.50 bid at New Orleans, with \$19.75 to \$20 asked. At Memphis \$15.50 per short ton is freely bid, but the mills are holding

for \$15.75 to \$16. At interior Texas points \$15 is being paid.

Cottonseed-Oil Notes.

The Ennis Oil Mill, at Ennis, Texas, has closed down for the season, but is buying all the seed obtainable.

The Caldwell Cottonseed Oil Mills, at Caldwell, Texas, are now grinding the last of this season's supply of seed, when they will close for the season.

The Barnwell Oil Mill, at Barnwell, S. C., is reported sold to the Southern Oil Co., which, it is said, will enlarge its capacity. The price it brought is said to be \$15,000.

The work on the new cottonseed-oil mill at Lafayette, Ala., was commenced last week, and will be in full operation for next season's business. Messrs. C. C. & L. L. Torbett, of Opelika, who are erecting the mill, will spend \$25,000 upon the plant.

The Producers' Cotton Oil Co. was organized at Yazoo City, Miss., on the 2d inst., with a capital stock of \$100,000, of which \$75,000 has been subscribed. The company will erect at once a large cottonseed-oil mill and ginney. It is stated that the mill will be ready for operation next fall.

The movement in cottonseed products in Texas is moderate, and the demand mostly from foreign sources. Prices are steady as follows: Prime crude oil, loose, 14½ to 15 cents, and prime summer yellow oil offered at 17 cents; prime cottonseed cake, \$14.50 to \$15.75, and prime cottonseed meal, \$14.50 to \$15.25 per short ton; linters, per pound, 2¼ to 2½ cents, all f. o. b. mill Texas interior points.

In New Orleans the market for cottonseed products is fairly active, with a good foreign demand for oil, cake and meal. Prices are steady without change. Receivers' prices are quoted as follows: Cottonseed, \$7 per ton of 2000 pounds net to the mills, no commission of any kind to be added; cottonseed meal jobbing per carload at depot, \$17 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$18.50 to \$19; oilcake for export, \$19 to \$19.50 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, strictly prime oil, crude, 15½ cents loose f. o. b. tanks at Mississippi Valley points; in barrels, 18 to 18½ cents; refined cottonseed oil, prime in barrels per gallon at wholesale or for shipment, 21½ to 22 cents for export; cottonseed hulls delivered per 100 pounds, according to location of mill, 12 to 17½ cents; linters, according to style and staple—A, 3½ cents; B, 3¼ cents; C, 2½ to 3 cents; ashes, none.

Business men of Memphis, Tenn., have organized the Memphis Commercial Association for the advancement of the city's interests from a commercial and financial standpoint. The membership already includes a number of the principal mercantile and manufacturing concerns of the city. H. J. Forsdick is president; J. A. Goodwin, Frank G. Jones, H. Morris and A. P. Truss, vice-presidents.

It is reported that a syndicate of Atlanta and Northern parties have purchased what is known as the Watts farm, in the suburbs of Portsmouth, Va. The property contains about twenty-nine acres, and it is considered desirable for manufacturing sites now being constructed around Portsmouth.

The Nashville Chamber of Commerce has suggested May 1 as the time for a convention to advance the industrial development of Tennessee.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., March 10.

The phosphate market shows more animation, and, in sympathy with the improvement in other fertilizer ingredients, there is a better tone to business. Brokers report sales of rock during the week at slightly better prices, especially for South Carolina. Among the river miners in South Carolina the work of development is being pursued with considerable vigor. The Central Phosphate Co. and the Coosaw Company have each three dredges at work, and their output is increasing, while there is a better demand from foreign sources. The other river companies are all fully engaged. Prices, it is said, are improving, and at present values the market is firm. In Florida both land rock and pebble miners are steadily employed, and shipments for the present month are quite in excess of February. The Tennessee miners, as previously reported, are working to better advantage, especially in the Mt. Pleasant phosphate field, and there is a good domestic demand, with more foreign inquiry. The volume of freight business in New York last week showed no increase in a general way. Long-voyage tonnage is in demand, though few offerings are firm for either prompt or forward delivery. The only phosphate charters reported are the following: British steamer Elfie, 1229 tons, from Fernandina to Stettin with phosphate rock at 17/6, May-June, and British steamer Thomas Melville, 1066 tons, from Fernandina to Kastrup and Aarhus with phosphate rock at 18/6, March.

Fertilizer Ingredients.

There is still a fair business doing in ammoniates, and from Southern manufacturers there has been a good demand. The movement in the South during January and February was quite active, so that stocks have been somewhat reduced, hence the present inquiry and demand. There has also been a good Eastern business, buyers having been in the market purchasing freely. Stocks in the West are reported very light.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	\$2 75 @	—
Nitrate of soda	1 75 @	1 80
Blood	1 72½ @	—
Hoof meal	1 65 @	—
Azotine (beef)	1 77½ @	—
Azotine (pork)	1 77½ @	—
Tankage (concentrated)	1 65 @	—
Tankage (9 and 20)	1 67½ @	10
Tankage (7 and 30)	15 00 @	15 50
Fish (dry)	20 00 @	—
Fish (acid)	12 00 @	—

Phosphate and Fertilizer Notes.

An order of court on the 5th inst. instructed Receiver Huger to sell at auction the plant of the Horseshoe Phosphate Mining Co., of Charleston, S. C. The date of sale has not been announced.

Among the steamers coaling at Norfolk, Va., last week was the steamer Laleham, carrying a cargo of 2549 tons of phosphate rock from Fernandina to Grabow and Glienken, shipping ports near Stettin, on the River Oder, in Prussia.

The fertilizer concerns at Wilmington, N. C., are enjoying an unusually active trade, several being obliged to run night and day to keep up with orders. At Charleston, S. C., the same activity exists in fertilizer circles, prices having advanced considerably and likely to go even higher.

The schooner Anna L. Mulford cleared last week from Charleston, S. C., with 941 tons of phosphate rock for Baltimore. The total domestic shipments of

phosphate rock from the ports of Charleston, S. C., since September 1, 1897, amount to 47,637 tons, against 49,582 for the corresponding period in 1896-97.

An order was signed last week by the Circuit Court at Charleston, S. C., authorizing the receiver to sell the valuable fertilizer plant of the Wappo Mills. The upset price is fixed at \$15,000. The property is situated in St. Andrew's parish, on the west bank of the Ashley river. It is understood that the object of the sale is to get a company to take hold of the mill and operate it.

The river phosphate mining industry in South Carolina has recently taken on considerable activity, and the demand is better, with prices showing a wider margin of profit. It is stated that the Central Phosphate Co. has two dredges at work, and will soon put in a number of tong pickers. The Beaufort Phosphate Co. has three dredges at work, and the Coosaw Company the same number. The Central Phosphate Co. loaded a cargo last week of 2650 tons of phosphate rock.

Mr. Albert F. Dewey, president of the Charlotte Harbor Lighterage & Stevedore Co., reports the shipments of phosphate rock from Punta Gorda, Fla., for the month of February as follows: Schooner Senator Sullivan for Elizabethport, N. J., with 1015 tons; schooner The Josephine for Baltimore, Md., with 950 tons, and schooner Augustus Welt for the same port with 1659 tons, making a total of 3624 tons, all by the Peace River Phosphate Mining Co.; amount previously reported 2181 tons, making a total of 5805 tons to March 1.

The outlook for more activity* in shipments of phosphate from the port of Fernandina is now very encouraging, the estimated shipments for the present month being placed at 25,000 tons. The total shipments for the month of January amounted to 8486 tons, and for February 9425 tons, making a total of 17,911 tons. The following charters for March are reported: Steamers Inglehame, Linwood and Verbena, by H. S. Ford; steamers Hexham and Sydenham and bark Lina, by Dunnellon Phosphate Co.; steamer Basuta, by J. H. Packard; steamer Lowlands, by J. Buttgenbach, and steamer, not named, by A. F. Jurchill. Of the above steamers, the Inglehame cleared on the 2d inst. for Rotterdam with 2000 tons of phosphate rock, and the Lowlands for Ghent with 2250 tons. The Basuta and Hexham were due to arrive on the 3d inst.

The status of the New River coal deal, which has been announced in some of the papers as having been closed at \$2,000,000, is that an Eastern syndicate has an option on practically the entire field, which will expire in about five months, the original option having been for six months. It is said that the operators are not anxious to sell and do not believe that the Eastern syndicate which holds the option will complete the purchase. The Eastern people are understood to be leading capitalists interested in the Chesapeake & Ohio Railroad.

The Wilmington (N. C.) Chamber of Commerce has elected the following officers for the ensuing year: President, James H. Chadbourne, Jr.; first vice-president, Walker Taylor; second vice-president, W. E. Worth; secretary and treasurer, John L. Cantwell.

Delegations from the business centers of the country continue to urge before congressional committees the creation of a department of commerce and manufactures.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., March 10.

The tone of the local lumber market shows a slight improvement, and during the past week the volume of business has been better. There is considerable demand from yardmen, boxmakers and planing mills, and prices show a firmer tone for certain grades of lumber. In yellow pine receipts continue moderate, and stocks are fully ample for the demand. Sales of edge flooring are reported at \$10.50 to \$11 per thousand, and edge box at \$8. Joists and scantling are also reported at \$7.50 to \$9. The demand for kiln-dried North Carolina pine is fair, and prices are firm. There is a fair demand for white pine, and the movement during the week has been more active, with values steady and stocks well assorted. Cypress is quiet, with prices about steady, and very little demand at the moment. In hardwoods there has been a good local selling movement for certain woods, and there has also been some inquiry from out-of-town buyers. The export demand is light, and with a dull European market there is very little doing among shippers.

Savannah.

[From our own Correspondent.]
Savannah, Ga., March 7.

During the month of February the volume of business at this port showed a remarkable increase over the preceding month. The records at the custom-house show the value of foreign exports to have been \$2,304,737, against \$1,399,983 for February last year, being an increase of \$904,755. In the general business of the port the lumber industry was characterized by unusual activity, the increase in the movement being over 100 per cent. as compared with the corresponding month of 1897. The total shipments of lumber in February amounted to 12,850,000 feet, against 6,600,000 feet last year, most of this being shipped to Northern ports. The demand at the moment is quite active and values firm and higher. At prices ruling at present the margin of profit is yet very narrow, and manufacturers are now endeavoring to raise the scale of prices. At all milling points there is a steady output of lumber and stocks are not allowed to accumulate. The following shipments of wood products were reported during the past week: Schooner Charles M. Patterson for Philadelphia with 597,090 feet of pitch-pine lumber, of which 493,003 feet were by the Georgia Lumber Co. and 104,087 feet by Southern Pine Co.; the schooner Frank Vanderherchen cleared for Philadelphia with 390,376 feet of pitch-pine lumber by John A. Calhoun; New York steamers took out 786,430 feet of lumber and Baltimore steamers 221,615 feet. Lumber and timber freights are steady, with rates unchanged. The rates from this and nearby Georgia ports are \$4.50 to \$5 for a range including Baltimore and Portland, Me. The schooner W. M. Oler, 695 tons, was chartered in New York last week to load ties at Brunswick for Boston on a basis of 15½ cents.

Jacksonville.

[From our own Correspondent.]
Jacksonville, Fla., March 7.

In all departments of the lumber trade of this port there is unusual activity and the situation at present is regarded by manufacturers and others in the lumber

industry as very promising. The demand for all wood products is increasing from year to year, and all the saw mills, both here and at adjacent points, have as many orders on file as they can fill for the next thirty days. The Cummer Lumber Co., the Bucki & Sons' mills and several others here are now running at their full capacity, with a constant demand for the better grades of stock. The volume of business transacted in the month of February was quite satisfactory, the total shipments amounting to nearly 10,000,000 feet of yellow-pine and cypress lumber. The coastwise exports of lumber and other wood products were as follows: Yellow-pine lumber, 7,552,000 feet; cypress lumber, 544,000 feet; shingles, 1,495,000, and cross-ties, 35,400. The foreign exports were 1,412,469 feet of yellow-pine lumber and 150,000 shingles. At present there are a number of vessels due to arrive and others loading lumber for Northern ports. The Clyde Line steamers are doing a splendid trade, carrying out full cargoes every trip. Among the lumber charters reported in New York last week were the following: Schooner Lucia Porter, 285 tons, Jacksonville to New York at \$5; schooner C. H. Wollston, 288 tons, Jacksonville to South Amboy at \$5; schooner Mary A. Hall, 341 tons, Jacksonville to Fall River or Providence, \$5, and schooner Maud Snare, 285 tons, Jacksonville to New York on private terms.

Mobile.

[From our own Correspondent.]
Mobile, Ala., March 7.

The volume of transactions in the lumber and timber market has been lighter than usual during the past week, and the movement in nearly all departments of the industry has shown very little activity. There is only a limited demand for sawn pine timber, European markets being dull, and few orders are received for sawn stuff. Hewn timber is in good demand for a good quality, but shipments are generally light. Sawn timber is still quoted at 10 to 10½ cents per cubic foot, 40-foot basis, and hewn timber will bring 12½ cents per cubic foot, basis of 100 cubic feet, average B1 good. Hewn oak is dull at 14 to 16 cents for first-class. There is still a limited demand for hewn poplar at 12 cents per cubic foot for large average girth. Ash of good quality and large girth is quoted at 12 to 13 cents per cubic foot. The demand for lumber is fair, and mills in this section are all running at their full capacity. During the past week the following clearances were reported: Steamer Colombia for Boca del Toro with 10,800 feet of lumber and other merchandise; steamer Belvernon for Tampico, Mexico, with 72,540 feet of lumber; bark Olivan for Buenos Ayres with 663,200 feet, and schooner Frederick for Georgetown, West Indies, with 56,000 feet. The total shipments of lumber from this port since September 1, 1897, amount to 26,722,967 feet, against 37,435,312 feet last year. Freights on lumber are steady, with rates as follows: To the West Indies, \$5 to \$6 per M; coastwise, \$5 to \$6; to Cuba, \$5 to \$5.50; River Platte, \$11.50 to \$12, and to Rio Janeiro, \$14 to \$15; timber and lumber by steamer to the United Kingdom and Continent, £5 5s. per standard; sail-hewn timber per load 31s., and sawn £5 per standard.

Enterprising English Journal.

The Timber Trades Journal, of London, England, signalizes its twenty-fifth anniversary by an issue, of February 19, almost encyclopedic in its character, reviewing elaborately the lumber business of the year. Among its special features, and they are many, is an exceedingly

thorough and interesting study of the export pine trade of the Southern States. In several articles are described the distribution of the various pines, their properties, turpentine farming and the development of ports as virgin forests in Texas and Louisiana have been opened up. Many half-tone illustrations add to the value of the publication.

Lumber Notes.

The new planing mill of Cross & Hubbard in Huntingdon, W. Va., commenced operations last week, giving employment to about 100 men.

During the month of February the shipments of wood products from the port of Brunswick, Ga., were as follows: Lumber 7,091,000 feet, shingles 661,610, timber 360,000 feet, and cross-ties 98,538.

The Beaumont Lumber Co., of Beaumont, Texas, filed an order for timber last week amounting to 2,000,000 feet. The timber is for the Frisco road, which is now building an extension in the Indian Territory.

A charter was granted last week to the Georgia Lumber Co., of Bluefield, W. Va. The capital stock subscribed is \$1000, with the privilege of increasing to \$500,000. J. M. Stevens, of Bluefield, and others are the incorporators.

The shipments of lumber from the port of Savannah for the month of February amounted to 12,850,000 feet, against 6,000,000 feet for the corresponding month in 1897. With the exception of a very small quantity, most of this lumber went to Northern States.

Messrs. Conway & Miller have purchased the planing mills and lumber yards formerly owned by Bass, Brown & Lee, Danville, Va., and will continue the business. The new firm has a large stock of and can fill orders promptly for sash, doors, frames, moldings, blinds, etc.

Receipts of building material at New Orleans last week, as reported by the secretary of the Mechanics, Dealers and Lumbermen's Exchange of that city, were as follows: Lumber 1,232,000 feet, shingles 20,000, laths 75,000, oak staves 64,000. Receipts of lumber for the season 42,678,200, against 37,630,000 feet last year.

A charter was granted last week to the Texas Yellow Pine Lumber Co., of Houston, Texas, in which city the principal office of the company is located, with an extensive milling plant at Warren, Tyler county. The capital stock of the company is \$100,000. The incorporators are J. J. Campbell, J. Lee Campbell and Y. W. McNeill.

The executive committee of the board of trustees of the University of Mississippi will meet about the 25th of the present month to consider bids for the yellow-pine timber on 21,912 acres of virgin forest situated in Harrison and Jackson counties, Mississippi. The estimation of timber on the tract shows 127,000,000 feet, formerly a naval reservation, selected forty years ago.

The movement in wood products this season at Palatka, Fla., is characterized by unusual activity. Manufacturers have plenty of orders, and there is an increasing demand for lumber, shingles, laths and building material. The Selden Cypress Door Co. has an overflow of orders, and among recent orders received by other concerns was one of the Wilson Cypress Co. for 7,000,000 laths.

The Baltimore Lumber Exchange held a special meeting on Monday last in the Builders' Exchange Building and ratified a new set of by-laws which were submitted to them by the managing committee. The managing committee of the

Baltimore Lumber Exchange consists of the following members: E. B. Hunting, F. E. Waters, R. W. Price, S. P. Ryland, Jr., J. W. Knowles, W. M. Burgan, P. M. Womble, J. L. Gilbert, W. V. Wilson, Jr., W. D. Gill, John Bruns and Norman James.

The Georgia and Alabama lumbermen met in Montgomery, Ala., last week and accomplished considerable business of importance. Much routine work was done, the price-list was revised and arrangements perfected to invite through committees mill men on each railroad to join the association that have not yet come in. The convention adjourned to meet in Montgomery on April 2. Among those present at the meeting were Messrs. J. H. Marbury, G. R. Hannon, W. E. Sistrunk, John L. Raul, W. W. Wadsworth, F. G. Pratt and M. Ramsey, of the Flint River Company, of Georgia, and a number of representatives of mills.

The first meeting of the North Carolina Forestry Society was held last week at Newberne, N. C. The following gentlemen were among those present: Dr. B. E. Fernow, chief of the forestry bureau of the United States Department of Agriculture; Dr. C. A. Schenk, forester to the Biltmore estate; Mr. D. M. Reardon, president of the Arizona Lumber Co.; Prof. J. A. Holmes and W. W. Ashe, of the North Carolina survey. A number of leading lumbermen of Newberne and vicinity were also present. An address was delivered by Dr. C. A. Schenk on "Our Commonwealth and the Necessity for Forest Preservation." The meeting was very harmonious, and the society will inaugurate a movement looking to the preservation of forest lands.

The sixth annual meeting of the National Lumber Dealers' Association was held in Cleveland, Ohio, on the 2d inst. In the absence of the president, Charles M. Betts, of Philadelphia, his annual address was read by J. J. McKelvey, of New York. One important statement made by the president was that the annual output of lumber in this country exceeds in value that of all the gold, silver, coal, iron and wheat. A number of resolutions were adopted and routine business transacted. The following officers were elected: President, John N. Scatterd, of Buffalo; first vice-president, John S. Esterbrook, of Saginaw, Mich.; second vice-president, R. C. Lippincott, of Philadelphia; treasurer, F. W. Cole, of New York; secretary and superintendent of the credit bureau, Eugene F. Perry, of New York.

Manufacturers and the South.

[Louisville Courier-Journal.]

The Manufacturers' Record is calling attention to the harmfulness of anti-corporation legislation, and is being supported by trade organizations, business men and newspapers. Last week the Atlanta Chamber of Commerce issued an address, showing the necessity of more factories in Georgia and calling for an amendment to the State constitution that will permit inducements to be offered to capitalists who propose investments of this sort. The good work has been taken up by Gen. Stephen D. Lee, of Mississippi; former Governor Northen, of Georgia; Governor Atkinson, of West Virginia, and many others of such influence as to encourage the hope that a number of laws which are now on the statute-books and which prevent the development of the country will be wiped out, and that new ones of such nature will not be enacted.

A committee is at work in Houston, Texas, forming a stock company to make that city a tobacco market.

MECHANICAL.**CEMENT FROM SLAG.**

A New Industry at Sparrow's Point, Md.—Its Possibilities.

The Maryland Cement Co., which has been constructing a plant at Sparrow's

company has a capacity of 200 barrels daily, while the Maryland Cement Co. can turn out 500 barrels in ten hours. This company is capitalized at \$50,000 and employs fifty hands. It is desirably located at Sparrow's Point, and can ship by water or rail. It has its own barrel factory, buying the necessary material in bulk. The officers are Frank H. Sloan,

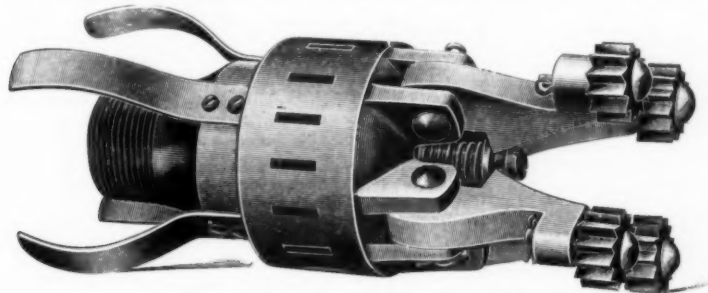


FIG. 1.—NEW POWER TUBE CLEANER.

Point, Md., near Baltimore, has begun operations, and is at present turning out about 200 barrels daily, although this is only a portion of the capacity of the works. Several months ago the Manufacturers' Record referred to the material which the company proposed to make, and which seems destined to have a very important effect in all operations where cement or concrete is used. The basis of the compound is the slag obtained from the blast furnaces. The company has a contract for ten years with the Maryland Steel Co. by which it obtains its "raw material" at a certain price per ton. The slag, in its molten state, is placed in contact with a stream of water, which hardens it and at the same time granulates the substance. It is then passed through pulverizing mills and finally treated to a chemical process, being mixed with ingredients which convert it into the cement for commercial purposes. The entire operation requires but ten hours. Thus far the company has found the Cuban ore, which is the kind used at Sparrow's Point, to be the best for its purposes, although there is a possibility that ore from Southern districts might be utilized to advantage.

The unlimited supply of the slag and the simplicity of the process employed are two important factors which have caused the company's operations to be regarded with interest. It is claimed that the cement can be furnished in quantities at such a low price that it can be used for purposes where the price of other cement prohibits its purchase. Tests which have been made by engineers and other experts apparently show that its durability, strength and adhesive qualities are of as high a standard as the imported material. Although the works have been in operation but a few months, orders are being filled from different parts of the country, including Philadelphia and Allegheny City, Pa., Dayton, O., and other cities in the West. There is a possibility that an export trade of large proportions may be developed as a result of this industry. Already the company has received inquiries from Great Britain concerning the product, and it is calculated that considerable may be shipped in the near future to points in the West Indies. The vessels carrying ore from Cuba to Sparrow's Point can be used for the West Indian trade, and as the ship companies are very desirous of securing return cargoes, a very low freight rate no doubt can be obtained for the material.

The factory at Sparrow's Point and one at Newark, N. J., are the only ones in this country turning out what is termed Toltec cement. Both are working under the same patent, but are independent of each other. The Newark

president; E. H. Wales, of New York, vice-president; B. G. Boileau, treasurer, and C. W. Field, secretary. All but Mr. Wales are Baltimoreans.

New Power Tube Cleaner.

Tube cleaners are devices in constant demand and high favor with users of

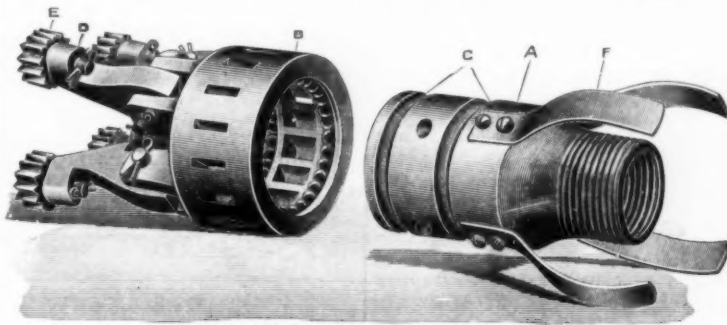


FIG. 2.—NEW POWER TUBE CLEANER.

power machinery. For the thorough cleaning of tubes there are a number of devices on the market, one of the most notable being the Weinland cleaners, made by the Lagonda Manufacturing Co., of Springfield, O. This company has just completed perfecting the new power tube cleaner, an illustration of which is seen herewith, and the many important advantages which are claimed for this machine are worthy of investigation by present or prospective users of such apparatus. A pamphlet giving full description, technical details, etc., can be obtained on application.

New Open-End Brake.

To meet the demand for improved machinery, made necessary by the advances in the manufacture of ranges, Messrs. J. M. Robinson & Co., 325-331 West Second street, Cincinnati, O., have introduced an improved four-foot brake for the expeditious work of bending and flanging, in addition to which a four-sided figure can be bent with a continuous operation at the conclusion of the fourth and last bend, and can be removed from the upper end of the top clamp without marring its shape.

The top and bottom clamps and bending leaves are the principal members of the machine. The top clamp, which is stationary, is for all ordinary bending and flanging; the bottom clamp, to which the bending leaf is journaled, is operated by two eccentrics, the peripheries of which come in contact with the under side of the bottom clamp, and by a movement of a lever, secured to the shaft on which the eccentrics are keyed, the bottom clamp will rise to a parallel line with the face of the top clamp and clamp the material with a powerful pressure, thus to bend it. To one end of the eccentric

shaft opposite to the lever is secured an eccentric, around which is a yoke, the upper end of which is linked to the left-hand end of the top clamp. Having made the fourth and last bend to the four-sided figure, the top clamp is secured at the right-hand end with a journal screw, with a two-armed nut on top coming in contact with the clamp. Releasing the nut will let the screw swing down out of the way, and a backward movement of the lever on the eccentric shaft will cause the top clamp to swing upon its journal near the left-hand end, in which position the completed work is free to be removed. A reverse movement of the lever will return the top clamp, when it can be secured with a two-armed nut and screw. Another valuable feature referred to is that the top clamp is adjustable for light and heavy material, sharp and round corners. The brake is not complicated in its movement, and the one lever on eccentric shaft does the clamping and raising of the top clamp. The eccentrics are adjustable for more or less pressure and any wear that may occur. The width between the clamps when wide open is one inch or less, according to the movement of the eccentric lever. These new features, in combination with adjustability, quick movement and the ease with

ers, carriage and wagon makers, blacksmiths, tanners and others whose work does not call for so constant a use of the machine as would justify the application of power in some form. The makers claim that the machine combines a maximum of elements of strength, durability and convenience, and that it meets the need, long felt, for a good lever bench punch.

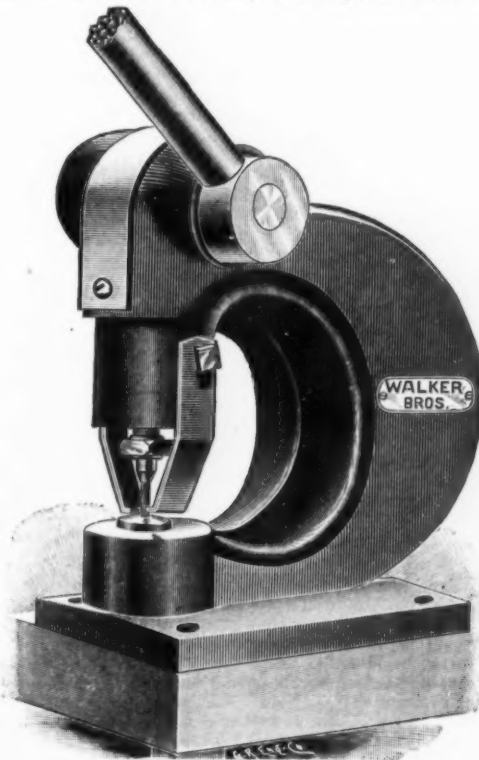
The cam is made of the best tool steel and works in long bearings. The lever may be worked from either front or back of the machine, as desired. The immense power is applied in a perpendicular direction, with no lateral strain, making operation comparatively easy on the heaviest work. No adjustment of dies is necessary, as the dies and punches are self-centering, and no time is lost in fitting up for desired changes. Details as to prices, illustrated descriptions, etc., will be supplied by the manufacturers, Messrs. Walker & Allen Machine Works, Lansing, Mich.

The Columbus (Ga.) Power Plant.

A meeting of the directory of the Columbus Power Co. was held at Macon, Ga., last week, and it was decided that immediate steps be taken to perfect the plans for the construction of the proposed water-power electrical plant at Columbus, Ga. The death of Mr. John Hill, of Columbus, the company's engineer and originator of the project for developing this power, left the plans uncompleted, but another engineer will complete them at once.

Mr. Perry N. Hill is now engaged in making surveys, taking profiles and preparing figures that will enable the company to award contracts soon for the construction work for the plant. This development will make accessible for use by factories and other industrial establishments a total of from 12,000 to 14,000 horse-power, which is to be transmitted electrically. The dam will be thirty-seven feet high.

The Columbus Power Co. has already closed negotiations for the establishment



LEVER PUNCHING MACHINE.

sire to bend soft sheet steel of No. 14 gauge or lighter in four-foot lengths or less.

Lever Punching Machine.

The lever punching machine shown is designed for the use of sheet-metal work-

of a large cotton mill and several other plants which will use the power. The company's principal officers are Messrs. H. M. Comer, of Savannah; J. F. Hanson, of Macon, and G. Gunby Jordan, of Columbus, who is treasurer. The capital stock is authorized at \$200,000.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted." In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Birmingham—Bed Factory.—S. E. Kehlot, of Chicago, contemplates the erection of an iron-bed factory in Birmingham. Address care of the Birmingham Paint & Glass Co., Birmingham.

Gadsden—Pottery.—H. B. Harvey, of Fort Payne, purposes the establishment of a pottery in Gadsden.

Mobile—Shingle Mills.—Stewart & Butt will rebuild their \$20,000 shingle mill which was recently burned.

Mobile—Water Works.—The city council has engaged George G. Earle, New Orleans, La., to prepare plans for the proposed municipal water works. Address the mayor.

Montgomery—Electric Plant.—The Mutual Light & Power Co. and the Montgomery Light Co. have consolidated and reorganized, electing W. F. Vandiver, president; C. G. Abercrombie, vice-president, and B. S. Maulsby, secretary. The company will expend about \$150,000 in improvements, which will include new gas plant, two new boilers, a 1000-horse-power engine, etc.

Newton—Clothing Factory.—T. K. Killebrew has put machinery in his cotton and woolen mill for manufacturing the product cloth into clothing.

Tallapoosa—Cotton Mill.—The Tallapoosa Falls Manufacturing Co. will enlarge its power-house, placing two additional flumes.

Tuscaloosa—Cotton Mill.—The Tuscaloosa Mills has been incorporated, with capital stock of \$60,000 paid in, to continue the operation of the Cottondale Mills, which was recently bought by D. L. Rosenau, of Northport, Ala.; incorporators, D. L. Northport, M. D. Rosenau, of Tuscaloosa; J. Pollock and E. E. Bernheimer, of Mobile; Louis and Joseph Black, of Cleveland, O., and H. P. Loveman, of New York. New machinery will be put in. Plant now has 12,000 spindles and 300 looms.

ARKANSAS.

Hudson (P. O. Ashdown)—Saw Mill.—The Hudson River Lumber Co., recently noted under Little River county as incorporated, will build a saw mill of 75,000 feet daily

capacity, planing machinery, dry-kilns, etc.; machinery has been purchased.

Little Rock—Steamboat Lines.—The Independent Packet Co. has been incorporated, capital stock \$5000, by C. H. Wiseman, Wm. Villhatsch, W. S. McCain, Pfeiffer Grocer Co., H. K. Cochran, Merchants' Transfer Co., Carl & Tobey Co., W. W. Dickinson, A. Karcher, A. C. Penzel and L. W. Cherry.

Springdale—Manufacturing Company.—The Springdale Manufacturing Co. has been incorporated, with capital stock \$25,000, by Millard Berry (president), E. C. Pritchard, Thomas T. West, J. T. Lane, John Fishero and J. M. Chandler.

FLORIDA.

Pensacola—Mercantile.—Cary & Co. have incorporated to deal in wood, coal, etc.; capital stock \$10,000.

Pensacola—Mining.—E. F. Skinner, R. M. Cary, Jr., H. H. Boyer, John Eagan, A. C. Blount, Jr., and others have incorporated the Mount Morgan-Mining Co., with a capital stock of \$20,000, for mining purposes.

Tampa—Sewer Construction.—The city has awarded contract to Friday & Sons, of Charleston, S. C., at \$34,001.50, for the construction of the proposed sewers.

GEORGIA.

Acworth—Cotton Mill.—The proposed cotton mill will have a capital stock of \$50,000, a large part of which has been subscribed. E. W. Lemon can be addressed for information.*

Atlanta—Hat Company.—C. H. Arnold and associates have incorporated the Arnold Hat Co., capital stock \$50,000, to deal in and manufacture hats.

Augusta—Tailoring Company.—The Trix Tailoring Co. has been organized; office 545 Broadway.*

Calhoun—Water Works.—The issuance of bonds for the construction of a system of water works is talked of. Address the town clerk.

Cedartown—Clothing Factory.—D. Drayton Perry, of Waynesville, N. C., contemplates establishing a factory in Cedartown for production of jeans, overalls and pants.

Dalton—Electric Light Plant.—The city contemplates the erection of an electric-light plant, and will probably issue bonds to purchase one; W. S. Pruden, mayor.

Dublin—Furniture Factory.—Jacob Zaff, of Muncie, Ind.; T. H. Overby and J. E. Smith, Jr., of Dublin, Ga., have completed arrangements for the erection of a furniture factory to cost \$15,000.

Gainesville—Ice Factory.—J. P. Canning contemplates the erection of an ice factory.

Griffin—Cotton Mill.—The report is not correct that W. J. Kincaid and associates will build a cotton mill soon.

New Bridge—Tannery.—A. S. Whetchel and Henry Butler contemplate the establishment of a tannery.

KENTUCKY.

Louisville—Tobacco Factory.—The Sutton-Patterson Co., with a capital stock of \$15,000, has been incorporated to manufacture cigars, cigarettes and cheroots by H. F. Sutton, J. H. Patterson and George Straus.

Louisville—Tobacco Factory.—The American Tobacco Co. is now arranging for the rebuilding of its factory, recently burned; D. X. Murphy & Bro. are preparing the plans, and permits to erect the buildings will be taken out this week. One building will be three stories high, of brick and fireproof, to be used as drying-house; one building to be one story high, 50x60 feet, for engines and boilers; this latter will join five-story building 104x195 feet, of brick, to be used as stemmery. The buildings will cost \$100,000.

Louisville—Real Estate.—The Louisville Property Co., capital stock \$50,000, has been incorporated by Milton H. Smith, H. W. Bruce, J. Huber Ringgold and William W. Thompson.

Louisville—Cavern, etc.—The Colossal Cavern Co., \$25,000 capital, has been incorporated by Milton H. Smith, H. W. Bruce, Cushman Quarrier, Daniel Breck and J. Huber Ringgold, to purchase and manage lands on which are caves and to operate hotels.

Louisville—School Agency.—O. M. Sutton, S. F. Pottinger and C. B. Blakey have incorporated the Sutton Teachers' Agencies,

with \$20,000 capital, to do a general school agency business and operate educational institutions.

Louisville—Pump Works.—Incorporated: The Reilly Steam Pump Co., by J. J. Reilly, George A. Somerville and Edward Graupin. The capital stock is \$50,000, and it is proposed to manufacture and handle steam pumps and pumping machinery. Address J. J. Reilly.

Ludlow—Electric Light Plant.—The Kentucky Electric Co., of Ludlow, has filed articles of incorporation; capital stock \$30,000. The incorporators are John Devere and Luke Lilly, of Cincinnati, and J. H. Gueme, of Ludlow. Will build a lighting plant at once.

Maysville—Distillery.—The H. E. Pogue Distillery Co. is erecting a two-story building, to cost \$7500, to be equipped with apparatus for drying still slop.

Paducah—Power-house.—Contract awarded to J. R. Lane at \$3440 to erect addition to power-house.

LOUISIANA.

Collinston—Cotton Gin and Press.—Reilly Bros. will build soon a steam cotton gin, elevators, presses, etc.

Donaldsonville—Ice Factory.—The Donaldsonville Ice Co. has let contract for the erection of a 35-ton ice factory addition to its 15-ton ice factory.

Glenmora—Saw Mills, etc.—The proposed saw mill, lately noted as to be erected near Glenmora, will be built and operated by the Calcasieu Pine Co., which owns about 60,000 acres of virgin pine timber in that vicinity. The mill will probably not be built for a year or more. Address company, care of James D. Lacey, 603 Hennen Building, New Orleans, La.

New Orleans—Soda-water Factory.—The New Orleans Soda Water Co. has been incorporated, with capital stock of \$50,000, to manufacture soda water, etc.; incorporators, Myles S. Waterman (president), Luigi Dell'Orto (vice-president) and others.

New Orleans—Building Company.—The Schneider Building Co., Limited, has been incorporated, with capital stock of \$5000, by John A. Schneider, B. J. Schneider (manager) and others. Address the manager.

Rayne—Sugar Refinery.—The establishment of a sugar refinery is in prospect. P. S. Lovell, of Crowley, La., and C. C. Beach, of Battle Creek, Mich., are interested.

St. Francisville—Ice Factory.—J. F. Irvine, W. H. Tenney, B. Mann, E. J. Buck and E. L. Newsham have organized a company, with \$20,000 capital stock, to build and operate an ice factory.

MARYLAND.

Baltimore—Heating Company.—Incorporated: The Beery Heating Co., by Otto Bruggeman, William A. Beery, Ira Plumley, Jos. C. Hobbs and James E. Tippet, with a capital stock of \$5000.

Baltimore—Rubber Company.—Incorporated: The Linthicum Rubber Co., for conducting a wholesale rubber goods business, by Charles W. Linthicum, Zachary T. Pindell, Stephen H. King, James W. Denny and Harry G. Evans. The capital stock is \$100,000.

Baltimore—Stationery Company.—The Sadler-Rowe Co., for conducting a publishing and stationery business, has been incorporated by Warren H. Sadler, Harry M. Rowe, Fairman A. Sadler, Harry C. Reitz and Edward A. Elliott. The capital stock is \$15,000.

Baltimore—Grocery Company.—The Wm. H. Crawford Co. has been incorporated for dealing in spices, groceries, etc., by George S. Baldwin, J. Kemp Bartlett, Jr., Wm. C. Crawford, Frank S. Hambleton and Samuel B. Wilson, with a capital stock of \$25,000, succeeding Wm. H. Crawford & Co.

Baltimore—Oyster Cultivation.—A bill has been introduced in the legislature incorporating the Chesapeake Experimental Oyster Planting Co. of Maryland. The incorporators are Lloyd L. Jackson, Leonard H. Neudecker, J. D. Mallory, Seymour Mandelbaum, John N. Bond, F. Albert Kurtz and George R. Gaither, Jr., all of Baltimore. The object of the company is to lease for twenty years, with the privilege of renewal for twenty years longer, land in the Chesapeake bay for oyster-planting purposes; land leased is not to exceed 2000 acres and not to be located within 100 yards of a natural known bed or rock. Address F. Albert Kurtz.

Baltimore—Gas Plant.—A bill has been introduced in the legislature to incorporate the Maryland Gas Co., incorporators being James Bond, William Ferguson, Frank A. Furst, Lennox Birkhead and Barnes Compton. The capital stock is to be \$2,500,000, with the privilege of increasing to \$5,000,000; company proposes the erection of a gas plant, laying of mains, etc. Address Lennox Birkhead.

Cumberland—Bridges.—The county has ordered the construction of six new iron bridges. Address "The Allegany County Commissioners."

Cumberland—Flour Mill.—The Cumberland Cereal Co. has been organized, with capital stock of \$20,000, to build a flour mill; directors, J. Shriver Woods, Wm. M. Bruce, Richard J. Bruce, J. Milnor Bruce, Jr., and J. B. G. Roberts, Jr. Address the last named.

Ocean City—Water Works.—In securing a new charter the city proposes obtaining privilege of issuing \$25,000 in bonds for water works, and possibly sewerage system. Address the mayor.

MISSISSIPPI.

Brookhaven—Furniture Factory.—E. C. Throp, of Union City, Ind., and Thomas H. Perkins, of Brookhaven, Miss., have arranged for the establishment of a furniture factory.

Brookhaven—Ice Factory.—Charles Heuck and C. E. Grafton have commenced the erection of their seven-ton ice factory; orders for machinery all placed.

Corinth—Clothing Manufactory.—The Corinth Clothing Manufacturing Co. has been incorporated with capital stock of \$20,000.

Greenville—Electric Light Plant.—The city will hold an election March 31 to vote on a proposition to issue \$35,000 in bonds for the erection of an electric-light plant. Address the mayor.

Natchez—Cotton Compress, etc.—The Rosalie Cotton Warehouse & Compress Co. has been incorporated, with capital stock of \$25,000, to build and operate cotton compresses, warehouses, etc.; incorporators, S. E. Rumble, T. V. Wensel, G. O. Korndorffer, S. B. Stewart and T. V. Wensel, Jr.

Yazoo City—Oil Mill and Ginnery.—The Producers' Cotton Oil Co. has been organized, with capital stock of \$100,000, \$75,000 of which has been subscribed; company will erect at once a cottonseed-oil mill and cotton ginnery.

MISSOURI.

Carthage—Shoe Factory.—The Commercial Club is negotiating for the establishment of a shoe factory.

Independence—Water Works.—The Independence Water Works Co. will make improvements to its system, laying five miles of new mains, establishing thirty-five new hydrants, etc.

Independence—Sewerage System.—It is proposed that the city vote on issuing bonds for the construction of a sewerage system. Address the mayor.

Joplin—Lead and Zinc Mines.—S. D. Chitwood and others have formed a company to develop lead and zinc mines.

Kansas City—Electric-power plant.—J. T. Randall, of Chicago, is planning the proposed extensive electric power-house which is to be built by the Kansas City-Leavenworth Electric Railway, Power & Mining Co. This power-house is to cost, it is reported, \$1,500,000, and will be located on the Kansas side of the river. Address the company mentioned.

Kansas City—Cattle Company.—Chartered (under West Virginia laws): The Kansas City Cattle Loan Co., by L. E. James, S. B. Armour, K. B. Armour, C. P. Morse and J. J. Squier.

Kansas City—Clothing Factory.—The new clothing factory of Burnham, Hanna, Munger & Co., noted last week, will be a seven-story building, 90x150 feet, equipped with 500-horse-power boilers, 250-horse-power engines, 75-kilowatt generators, elevators, laundry machinery, etc.

Kansas City—Electric Lighting.—Cornelius S. Sweetland, of Providence, R. I.; Benjamin Friedberg, Kansas City, Kan., and R. J. Ingraham, of Kansas City, Mo., are applying to the city council for electric-lighting franchise.

St. Louis—Car-wheel Company.—Incorporated: The St. Louis Car Wheel Co., cap-

ital stock \$250,000, by J. H. Bass, J. W. Nute, S. F. Pryor, J. J. Morse and H. S. Priest.

St. Louis—Pattern Company.—Incorporated: The Remmers Pattern Co., capital stock \$5000, by T. W., H. B. and H. M. Remmers.

St. Louis—Manufacturing.—Incorporated: The Westlake Mercantile & Manufacturing Co., capital stock \$50,000, by Ann L. Merritt, C. J. Zettinger, W. C. Jones and T. J. Merritt.

St. Louis—Sand, etc.—Incorporated: The Mound City Sand & Gravel Co., capital stock \$3000, by Frank Warner, Arthur Post, C. A. Cunningham and F. R. Bissell.

St. Louis—Orchards.—Incorporated: The McNair Orchard Co., capital stock \$125,000, by L. W. Day, James Axtell, T. J. Flanagan, R. Bakewell and F. P. McNair.

St. Louis—Improvement.—Incorporated: The Metropolitan Improvement Co., capital stock \$10,000, by R. H. Cole, C. G. Besch and C. H. Hazenstob.

St. Louis—Realty Company.—Incorporated: The Horton Realty Co., capital stock \$80,000, by Benjamin, W. M. and Monroe Horton.

St. Louis—Staples, etc.—Incorporated: The Union Staple & Seam Re-enforcing Co., capital stock \$10,000, by W. B. Versteeg, F. H. Sachleben, Gliburs Hay and others.

NORTH CAROLINA.

Charlotte—Clothing Factory.—The Shelton-Smith Manufacturing Co. has been organized, with capital stock of \$10,000, to operate a drawers, overall and pants factory; Vinton Liddell, president; T. M. Shelton, secretary, and F. P. Smith, superintendent. Address the last named.

Charlotte—Pump Works.—Incorporated: The Park Manufacturing Co., by W. E. McElroy, John R. Pharr and W. E. Moffatt. The capital stock is \$25,000, with privilege of increase to \$50,000, and the business is the manufacture of combined pumps and heaters, cotton-mill machinery and general repair work; William Anderson, president; W. E. Moffatt, vice-president; W. E. McElroy, traveling agent, and John R. Pharr, secretary and treasurer. Company will enlarge and continue the plant established by Park & Pharr.

Elizabeth City.—Cotton-mill Supply Works. The Cotton Mill Supply Works, Frank P. Petway, manager, will rebuild at once its burned plant.*

Granville—Copper Mine.—Bickford, Spear & Co., of Boston, Mass., have purchased a controlling interest in the Royster copper mine in Granville county.

Harden—Cotton Mill.—The Harden Manufacturing Co. is reported as contemplating the doubling of its equipment; now has 2080 spindles.

Mount Olive—Electric-light Plant.—J. D. Williams will build the electric-light plant recently noted; machinery not purchased yet; capacity of 400 lights to be installed.*

North Carolina—Corundum Mining, etc.—The National Abrasive Manufacturing Co., recently noted as incorporated, purposes the development of corundum deposits on a tract of 20,000 acres of land in North Carolina. Timber is also in the tract in large quantities and will be marketed; George B. Kirkbride, secretary, 36 Wall street, New York city.

Spray—Cotton Mill.—For information regarding the Nantucket Cotton Mills, noted last week as incorporated, address James S. McAllister, secretary-treasurer, Worthville, North Carolina.

Troy—Cotton Mill.—The Smitherman Cotton Mills, noted last week as incorporated, has capacity of 5000 spindles and 200 looms; about half of this machinery will be put in now. The cards and spindles are now being started and will operate day and night.

Wilmington—Cotton Mill.—The Wilmington Cotton Mills has ordered eighty new looms.

SOUTH CAROLINA.

Alken—Brick Works.—Hankinson & O'Keefe have put in an additional machine of 60,000 brick capacity daily.

Barnwell—Oil Mill.—It is reported that the Barnwell Oil Mill will be enlarged.

Fountain Inn—Cotton Mill.—The proposed cotton mill, previously noted, has organized with the following directors: J. W. Shell, H. L. Shaw, J. A. Cannon, A. S. Peden and J. W. Givens; will manufacture yarns; plant to have 3000 to 6000 spindles and cost \$50,000 to \$75,000. Address J. W. Givens.*

Georgetown—Rice Mill.—C. P. Allston will rebuild his burned rice threshing mill during the summer.

McColl—Cotton Mill.—The Beaver Dam

Cotton Mills will be organized for the erection of a 5000-spindle mill by F. P. Tatum, J. B. Pipkins, A. W. Morrison, T. E. Gibson and Charles Iceman. Address F. P. Tatum. [This project was first proposed a year ago, but lapsed.]

Newberry—Land Company.—Chartered: The Newberry Land & Security Co., by F. M. Martin, James H. McIntosh, George W. Sumner, Charles J. Purcell and John M. Kinard. The capital stock is \$50,000.

Orangeburg—Railroad Appliances.—Incorporated: The National Automatic Railroad Switch & Appliance Co., by Edwin J. Jenkins, H. H. Brunson and J. M. Oliver.

Rock Hill—Electric-light and Water Works.—Incorporated, by A. R. Smith, David Huchison, R. T. Fewell and James W. Cherry, the Rock Hill Light & Power Co., to establish and operate a system of water works and an electric-light and power plant. The capital stock is to be \$50,000.

Spartanburg—Bobbin Factory.—C. W. Baldwin, of Athens, Ga., proposes the organization of a \$15,000 stock company to establish a bobbin factory in Spartanburg.

Waverly Mills—Mercantile.—Chartered: The Waccamaw Mercantile Co., by Louis Breslauer, L. C. Lichotte and Ralph Nesbit. The capital stock is \$15,000.

Winnsboro—Telephone System.—For information regarding the proposed telephone system noted last week address T. K. Elcott.

Winnsboro—Electric-light Plant.—Item under this heading reported last week referring to electric-light plant was an error. The proposed plant is contemplated at Winnsboro, Texas. (See item in this issue under "Winnsboro, Texas.")

TENNESSEE.

Chattanooga.—The Carlin Furniture Co., 1365 Market street, will erect a saw mill and chair factory.*

Dayton—Iron Furnace.—The Dayton Coal & Iron Co. has put in blast No. 2 furnace, thus doubling its capacity and giving employment to 400 men.

Dyersburg—Hub Factory.—G. G. Roberts & Co. will not at present rebuild their burned planing mill, but will instead erect a hub factory at a cost of \$7000; will also manufacture rims.*

Martin—Medicine Factory.—The Rogers Drug Co. has been organized, with a capital stock of \$25,000, by R. R. Rogers, R. C. Whitnell, C. C. Blake, J. I. Wilkes, L. M. Martin, G. E. Bowden and John Q. Fenville and G. W. McMillon, of St. Louis, Mo., for the purpose of manufacturing the "Sure Blue Chill Cure."

Nashville—Carriage Company.—The Nashville Chair & Carriage Co. has been incorporated by F. H. Connell, O. A. Whitman, W. H. Elwood and others.

Nashville—Mercantile.—The Fisher Co., Limited, has been organized for the purpose of conducting a general agency and brokerage business, with a capital stock of \$12,500, by D. A. Fisher, E. T. Bennett, George L. Forrest, C. F. Reder and George H. Matthews.

Tulahoma—Tobacco Factory.—P. H. Elmore, of Eagleville, contemplates the erection of a tobacco factory. Address care of J. G. Aydelott, Tulahoma.

TEXAS.

Alvin—Telephone System.—The Alvin & Angleton Telephone Co. has been organized to establish a system, with A. J. Birchfield, president; O. S. Cummings, secretary-treasurer, and F. J. Bush, general manager.*

Austin—Cannery.—A company has been formed to establish a cannery with Carl F. Drake, president; John Orr, vice-president, and George A. Hill, secretary.

Corsicana—Water Works.—Mr. Harding, receiver of the Corsicana Water Works, is having surveys made for contemplated enlargements and extensions.

Denison—Ice Factory.—A stock company has been organized, with \$25,000 capital, to erect an ice factory; names of interested parties will be announced later.

Galveston—Wharves, Docks, etc.—Chartered: The Galveston East End Pier, Wharf, Dock, Shipping & Terminal Co., capital stock \$500,000, for constructing, maintaining and operating terminal railway companies, the railway terminals to be constructed along the line of approaches on the piers, docks and wharfs of the corporation's property, connecting with any railways which desire to use said facilities; estimated length of railways and connections ten miles; incorporators, Sydney T. Fontaine, J. E. Boren, S. G. Kelkirk, J. R. Cheek, C. J. McRae, W. B. Kinkad, G. A.

Meyer, Fred Chase, M. B. Henderson, of Galveston, and J. E. Newton, of Sour Lake.

Gonzales—Electric Plant.—The Citizens' Electric Light & Power Co., capital stock \$5000, to supply electric light, heat and water-power, has been incorporated by A. Kleine, Jr., W. B. Houston, Charles Berlinger, L. C. Brunner and J. D. Sayers, Jr.

Greenville—Flour and Meal Mill.—Richter, Lania & Co. will rebuild at once their burned flour mill.*

Hillsboro—Flour Mill.—Louis Legan, of Springfield, Mo., contemplates the erection of a 50-barrel flour mill in Hillsboro.

Iowa Park—Grain Elevator.—J. H. Souther will build an elevator for handling wheat, oats and other grain.*

Paris—Ice Factory.—A company is being formed, with E. J. Mickler manager, to erect an ice factory.*

San Angelo—Water Works.—The San Angelo Water Works Co. has reorganized, with capital stock placed at \$50,000.

Sherman—Flour Mills.—Incorporated: The Chapman Milling Co., capital stock \$10,000, to do a general milling business; incorporators, R. A. Chapman, R. A. Chapman, Jr., and George F. Chapman.

Strawn—Coal Mines.—The Content Co., reported last week, should have read the Central Coal Mining Co. Full particulars regarding the proposed coal mining will be announced later.

Temple—Water Works.—The Temple Artesian Water Co. has secured new franchise and will construct system.

Terrell—Ice Factory.—George Walter, of Fort Worth, Texas, has contracted for the equipment of a 40-ton ice factory in Terrell.

Waco—Soda-water Factory.—Incorporated: The Southwestern Soda Fountain Co., capital stock \$30,000, to manufacture and sell phosphates, soda fountains, extracts, flavors and everything incident thereto; incorporators, W. B. Morrison, W. J. Befley and R. H. Befley.

Warren—Lumber Mills.—Chartered: The Texas Yellow Pine Lumber Co., principal office at Houston, capital stock \$100,000, for general lumber manufacturing; incorporators, J. I. Campbell, I. Lee Campbell and Y. W. McNeil.

Winnsboro—Electric-light Plant.—The Winnsboro Electric Light & Power Co. has been organized to build an electric-light plant at a cost of about \$3000; probably a system of water works will be constructed later on. R. G. Andrews, president, can be addressed for information.*

VIRGINIA.

Chatham County—Iron Mines.—E. R. Hunter, of Lynchburg, Va., has leased and will develop the Pittsville iron mines in Chatham county.

Clarksville—Toll Bridge.—The Clarksville Toll Bridge Co. has been organized by W. D. Blanks, W. H. Russell, Henry Wood, Jr., Robert Haskins, C. S. Wood and Thomas Williams, to build a toll bridge across Roanoke river. Bids will soon be asked. Address W. D. Blanks.*

Danville—Overall Factory.—E. K. Bryan, Jr., and associates contemplate the establishment of an overall factory.*

Ettricks—Silk Mill.—John N. Stearns & Co. have completed their dyehouse; an addition to the silk mill is also being built.

Hampton—Woodworking Factory.—The Hampton Sash & Door Manufacturing Co. has been chartered, with Thomas E. Staggs, of Richmond, president; Jesse S. Jones, treasurer, and James W. Lee, secretary; will operate the plant formerly owned by Patrick, Massenburg & Co.

Haymarket—Cannery.—J. F. Gardner and M. E. Seasier will establish a cannery of 8000 cases capacity.

Lynchburg—Dyeing Plant.—The Stamford (Conn.) Manufacturing Co. will rebuild at once its burned dyeing plant in Lynchburg; plant will cost probably \$60,000.

Marion—Electric-light Plant.—B. W. Dinsmore has franchise for lighting the city and will erect plant of 400 incandescent lights of sixteen candle-power each.

Newport News—Sewerage System.—The city is now advertising for bids on the construction of its proposed sewerage system. Address "The Sewerage Commission."*

Norfolk—Ice Factory.—The Citizens' Ice Co., capital stock \$50,000 to \$100,000, has been incorporated with Edward Spaulding, president; A. P. Page, vice-president; W. J. Baxter, Jr., secretary and treasurer. Contract has been awarded for a 60-ton ice factory.

Norfolk—Sewerage, etc.—The local board of improvement of Brambleton ward has adopted a resolution asking the council to

authorize the issue of bonds to the value of \$150,000 for establishing a system of sewerage and improving streets. A vote will probably be taken on the proposition in May. Address the mayor.

Patrick County—Timber Lands, Saw Mills, etc.—Kibler & Ray, of O'Keeffe, W. Va., have purchased 35,000 acres of timber lands in Patrick county and will erect saw mills to cut the timber; will locate plant by June 1, and will be prepared when mill is completed to furnish 10,000,000 to 15,000,000 feet of lumber yearly.

Richmond—Cotton Mill.—It is stated that J. Haydock, of New England, contemplates the erection of a cotton mill in Richmond. Address care of "Hotel Jefferson," Richmond.

Suffolk—Electric-light Plant.—For information regarding proposed municipal electric-light plant address J. W. Hosier and W. N. McAnge, committee.

Williamsburg—Cannery.—Arthur Denmead has purchased machinery for the ice factory reported last week; plant will have capacity of four tons; a canning equipment will also be installed.*

Williamsburg—Furniture Factory.—It is rumored that Western capitalists will establish a furniture factory; L. D. Dillingham can give information.

WEST VIRGINIA.

Charleston—Mining.—Chartered: The Clear Creek Hydraulic Mining Co., office 926 Stock Exchange Building, Chicago, Ill.

Charleston—Power Plants.—Chartered: The Multiple Power Co., A. N. Chandler & Co. promoters, the Bourse, Philadelphia, Pa.

Charleston—Construction Company.—Chartered: The Mountain State Construction Co. Address C. Sprigg Sands, Clarksburg, W. Va.

Charleston—Engineering Company.—Chartered: The American Engineering Co.; information can be obtained of Wilmot & Gage, attorneys, 55 Broadway, New York city.

Charleston—Coal Company.—Chartered: The United States Bituminous Coal Co.; James B. Fowler, promoter, 240 South Eighth street, Philadelphia, Pa.

Charleston—Gold Mining.—The Oregon Gold Mining Co. has been chartered; James G. Janeway, attorney, 26 Exchange Place, New York city.

Charleston—Grain and Feed.—Incorporated: The Charleston Grain & Feed Co., with \$10,000 capital and privilege of increasing to \$50,000, by Charles C. Lewis, R. G. Hubbard, C. C. Lewis, Jr., J. W. Hubbard and Julius Staehlin.

Charleston—Hames Factory.—The J. M. Nash Hames Co. has been incorporated, with capital stock of \$100,000, to establish a hames factory of 100 dozen pairs daily capacity, to employ twenty-five men. J. M. Nash, J. H. Huling, W. S. Lewis, W. M. O. Dawson, Charles Capito and others are interested. Of the capital stock \$12,000 is paid in. Address J. H. Huling, general manager.

Clarksburg—Construction Company.—Incorporated: The Mountain State Construction Co., with an authorized capital of \$2,000,000, for the purpose of constructing railroads, bridges, telegraph and telephone lines, mills, factories, etc. The incorporators are James F. Allen, E. R. Davis, Lyn S. Horer, B. W. Boggess and Fleming Howell. Address the last named.

Hinton—Mercantile.—The Hinton Grocery Co., \$30,000 capital and privilege of increasing to \$100,000, has been incorporated by P. W. Massie and John D. Sweeney, of Athens, W. Va., and H. Ewart, Frank Lively, James H. Miller, O. O. Cooper, R. R. Flanagan, S. O. Fredeking, J. Hugh Miller, A. G. Flanagan, Ella R. and Stella M. Ewart, R. D. Rose, J. H. Jordan, W. J. Brightwell and L. P. Graham, all of Hinton. Address the last named.

Moundsville—Electric-power Plant.—The Cumberland-Piedmont railway lines will build a power-house of 1500 horse-power at the start. For information address John W. Burchinal.

Piedmont—Telephone Line.—The Gordon Telephone Co. will complete a line to Keyser.

Ronceverte—Telephone System.—The Mutual Telephone Co. has been organized, with an authorized capital of \$10,000, to construct telephone line from Marlinton to Monroe Academy, Pocahontas, Frankfort, Lewisburg, Ronceverte and Greenbrier via Organ Cave, Pickaway and Union.

Wheeling—Water-works Improvements.—The city recommends the expenditure of about \$100,000 on water-works improvements; a 12,000,000-gallon pump is recom-

mended. Address H. F. Jones, president city water board.

BURNED.

Bluefield, W. Va.—Hotel Graham, near Bluefield.

Charleston, W. Va.—Flour mill of W. O. Hardman, in Tyler county, near Charleston; loss \$12,000.

Kenova, W. Va.—Flour mill of Kenova Flouring Co.; loss \$10,000.

Quanah, Texas.—Cement and plaster mill of Acme Plaster Co.; loss \$40,000.

BUILDING NOTES

Abilene, Texas.—Depot.—The Texas & Pacific Railroad Co. will build a depot; L. S. Thorne, manager, Dallas.

Anniston, Ala.—Church.—The Roman Catholics will build a church. Address Rev. D. A. Brady.

Baltimore, Md.—Dwellings.—Marvin H. Murray will erect eight three-story dwellings.

Baltimore, Md.—Dwellings.—J. P. Brandon will erect thirty-two two-story dwellings; M. D. Selba will erect twenty two-story dwellings; C. B. Burdette will erect eighteen two-story dwellings; George C. Goldman will erect seven two-story dwellings.

Birmingham, Ala.—Store.—H. E. Klien will erect a \$10,000 store building.

Columbia, Ala.—Business-houses.—Judge W. W. Jones will erect business-houses.

Columbia, Ala.—Hotel.—John N. Conover will erect a hotel.

Corsicana, Texas.—Business Building.—S. A. Pace will erect a brick business block.

Corsicana, Texas.—Warehouse.—Fleiming & Templeton will build a cotton warehouse.

Cumberland, Md.—Church.—Bedford Street M. E. congregation has purchased \$3500 site for a church building.

Dalton, Ga.—Jail.—Plans have been adopted for the proposed jail building, to cost \$10,000. Contract will be let May 3. Address J. Boyle, ordinary.

Davidson, N. C.—Stores.—Emery Wilson and M. W. Crawford will erect a double-store building.

Fort Worth, Texas.—Depot.—Incorporated: The Union Passenger Depot Co., capital stock \$200,000, to build a union depot; incorporators, J. A. Edison, G. A. Quinlan, S. B. Hovey, John Hornby, L. S. Thorne, Morgan Jones, L. J. Polk and J. W. Maxwell.

Greensboro, N. C.—Residences.—Mrs. Geo. H. Yates will erect a residence; Mrs. J. P. Scott will erect two residences.

Kansas City, Mo.—Residences.—Plans have been completed for a \$7500 residence for Leon Block; W. N. Moore will build a \$6500 residence; Frank Foster has let contract for erection of an \$8000 residence.

La Grange, Ga.—Church.—Plans have been accepted for a \$20,000 church to be built; will want circle pews, stained glass, heating plant, rolling blinds, pulpit, etc. Address "The Pastor," Methodist Church.

Leitchfield, Ky.—Bank Building.—Leitchfield Deposit Bank will rebuild its burned office building; will need vault and bank safes, furniture, fixtures, etc.

Louisville, Ky.—Residence.—W. S. Wymond will erect a \$4000 residence.

Montgomery, Ala.—Depot.—The Western Railway of Alabama will build a \$75,000 depot in Montgomery. Address G. C. Smith, manager, Atlanta, Ga.

New Orleans, La.—Hotel.—The Schlitz Brewing Co., of St. Louis, Mo., is reported as to build a hotel at New Orleans.

Newport News, Va.—Church.—Plans are being prepared for a new church building for the Second Baptist congregation. Address Rev. Mr. MacKay.

Newport News, Va.—Opera-house.—J. O. Marye, of Newport News, will prepare plans and specifications for the proposed opera-house of J. O. Winston & Co., recently reported. Address F. W. Sims, Louisa, Va., who represents the builder.

Ocean City, Md.—D. J. Adkins, Berlin, Md., has contract at \$15,270 for the erection of building for St. Rose's Industrial School, of Washington, D. C.

Petersburg, Va.—Bank Building.—The Petersburg Savings & Insurance Co. will erect a bank building at a cost of \$35,000.

Petersburg, Va.—Office Building.—The Petersburg Savings & Insurance Co. will erect an office building; Alex. Hamilton, vice-president.

Portsmouth, Va.—Residences.—Dr. V. G. Culpepper is preparing plans for seven resi-

dences; Dr. Charles L. Culpepper is erecting a \$16,000 residence.

Roanoke, N. C.—Hotel.—Col. William F. Beasley has formed a company to build a hotel.

St. Martinville, La.—Depot.—The Southern Pacific Railway Co. will build depot, wharves, etc.; A. C. Hutchinson, president M. L. & T. division, New Orleans.

Tuscaloosa, Ala.—Stores.—J. H. Fitts has awarded contracts for the erection of five store buildings 118x132 feet in all.

Wadesboro, N. C.—School.—C. C. Hook, of Charlotte, N. C., has completed plans for school building for Wadesboro, to have steam-heating system, ventilating, etc. Address the mayor.

Washington, D. C.—Office Building.—Jas. G. Hill has completed plans and specifications for an office building to be seven stories high, 77x44 feet, have all modern improvements, etc.

Washington, D. C.—Dwellings.—Paul J. Pelz will prepare plans for a residence for Mrs. Joseph Beale; site for building cost \$40,000. Henry Ives Cobb will prepare plans for two dwellings to be built by Arthur Cowdill; to have laundry, heating plants, baths, etc. A. B. Mullett & Co. have completed plans for frame house for N. Lindsay; to have tiled bathroom, cabinet mantels, electric fixtures, steam heat, etc. Wm. A. Kimmel will erect four three-story houses, each 16x60 feet, having cabinet mantels, tiled baths, electric fixtures, steam heat, etc.; plans by Wm. J. Palmer. D. B. Groff will erect three houses 16x30 feet.

Winchester, Ky.—Pythian Temple.—The Pythian Lodge proposes the issuance of bonds for \$6000 to build a temple, three stories. Address T. J. Stuart for information.

RAILROAD CONSTRUCTION.

Railways.

Aberdeen, N. C.—It is reported that the Aberdeen & Asheboro Railroad Co. has decided to extend its line from Troy to Mount Gilead, a distance of about fourteen miles. A. F. Page, at Aberdeen, is president of the company.

Beaumont, Texas.—The work of constructing the railroad being built by the Beaumont Wharf & Terminal Co. has begun. It is to be about five miles in length. Rails for it have been purchased. A. Wilson is general manager of the company.

Charleston, S. C.—It is stated that the financial arrangements have been completed for building the Charleston & Seashore Railroad and that contracts are to be let at once, the line to be completed by June 1. J. S. Lawrence is one of the promoters of the enterprise.

Chesterfield, Va.—One of the officers of the Virginia Central Railroad Co., recently incorporated, informs the Manufacturers' Record that it has no special connection with any other line. It is chartered to run from a point on the James river to the coal deposits in Chesterfield county. Among those interested is J. Chester Wilson, secretary of the International Coal Mining Co., 706 Betz Building, Philadelphia.

Deepwater, W. Va.—A correspondent of the Manufacturers' Record states that the extension of the Deepwater & Loup Creek Railroad will be about sixty miles beyond Deepwater. No work is being done at present. The Gauley Mountain Coal Co., of Ansted, W. Va., is back of the enterprise.

El Reno, Okla.—It is announced that J. W. Maney & Co., of El Reno, have a contract to grade twenty-five miles of the El Reno & Southwestern Railroad, between El Reno and a connection with the Fort Worth & Denver road. It is reported to be an extension of the Choctaw, Oklahoma & Gulf road, of which Francis I. Gowen, at Philadelphia, is president.

Fort Smith, Ark.—The Arkansas Central Railroad has been completed from Fort Smith to Charleston, a distance of twenty-five miles. C. C. Godman, at Fort Smith, is the principal promoter.

Fredericksburg, Va.—J. W. Coffin, a railroad contractor of New York city, is preparing for the commencement of work on the proposed Virginia, Fredericksburg & Western Railroad. George L. Rodgers, of Bridgeport, Conn., secretary of the company, is in Fredericksburg. The road will run through the northern neck of Virginia to Chesapeake bay.

Galveston, Texas.—The Bolivar Channel & Dock Co. has been formed to construct terminals, etc., for the Gulf & Interstate Railway Co., of which L. P. Featherstone, at Galveston, is general manager.

Hamburg, Ark.—It is reported that track-laying has begun on the Mississippi River, Hamburg & Western Railroad between Cone and Hamburg. J. M. Parker, at Hamburg, is general manager of the company.

Junction City, Ark.—It is reported that the Arkansas Southern Railway Co. has determined to extend its line to Port Arthur, Texas, through Arkansas and Louisiana. The distance from Junction City is about 200 miles. C. C. Henderson, of Junction City, and J. W. Brown, of Camden, Ark., are among the promoters of the line.

Manchester, Ky.—The business men of the town are endeavoring to secure an extension of the Louisville & Southeastern Railroad along Goose Creek valley to Manchester. B. P. White, Sr., and Allen W. Baker are among those interested.

Middlebourne, W. Va.—An election has been ordered for April 1 in several districts of Tyler county to decide the question of issuing bonds for the proposed railroad from Sistersville, W. Va., to Salem, W. Va., in which A. B. Smith, of Martinsburg, W. Va., is interested.

Monroe, La.—A representative of the Monroe Railroad & Construction Co. informs the Manufacturers' Record that it has secured \$400,000 in franchises to build the proposed railroad from Monroe to Natchitoches, a distance of eighty-five miles. R. A. Shotwell is one of the company.

Moundsville, W. Va.—The Moundsville & Wheeling Railroad, to be built from a point near Crow's Mills, Pa., to Wheeling, W. Va., by way of Moundsville, is being promoted by Alexander P. Funk, P. Minturn Smith and Clarence N. Smith, all of New York. The company has established an office at No. 11 Broadway, New York.

Nicholasville, Ky.—It is reported that the Louisville & Southeastern Railroad Co. has made arrangements to construct the extension of its line from Irvine to Beattyville, and that work is to begin on April 1. The extension will be about thirty-five miles in length. Adolph Segal, of Philadelphia, Pa., is one of the principal owners of the road.

New Orleans, La.—It is reported that the New Orleans & Western Railroad Co., also the Kansas City, Pittsburg & Gulf Company, have become interested in the proposed bridge across the Mississippi river at New Orleans, and a conference will soon be held with a view of constructing it. The Phoenix Bridge Co., of Phoenixville, Pa., is interested.

Newport News, Va.—One of the promoters of the Newport & Old Point Railway & Electric Co. informs the Manufacturers' Record that work is to begin on this work at once. It will reach Newport News, Hampton and Old Point. W. J. Payne, at Richmond, Va., may be addressed for particulars.

O'Keeffe, W. Va.—Messrs. Kibler & Kay advise the Manufacturers' Record that they will build about fifteen miles of narrow-gauge railroad line into timber property they own near Mount Airy, in Patrick county, Virginia. The road is to be built during the present year.

Raleigh, N. C.—It is stated that the promoters of the Cape Fear & Northern Railway Co. have decided to build it from Raleigh to Lillington, in Harnett county, by the way of Cary and Holly Springs. The company is to be capitalized at \$300,000 and has elected the following officers: G. B. Alford, president; T. B. Holt, vice-president; J. C. Angler, secretary, treasurer and general manager.

Reidsville, Ga.—It is reported that surveys have been completed and right of way secured for the road from Reidsville to a connection with the Florida Central & Peninsular system. Perkins Bros., of Harrison, Ga., are promoting the enterprise.

Richmond, Va.—The Richmond Traction Co. is considering an extension of its electric line to Newcastle Ferry, and, it is reported, may extend further to Tappahannock, a distance of twenty miles in all. E. Randolph Williams is president of the company.

Rowlesburg, W. Va.—It is reported that a contract has been let to the Drake & Stratton Co., of Philadelphia, for twelve miles of the extension of the road to be built along the Cheat river valley. J. J. Stoer, Girard Building, Philadelphia, is president.

Saltville, Va.—It is reported that the Matthalson Alkali Co. has determined to build a railroad to Mendota, Va., a distance of about twenty miles.

Smithfield, Va.—C. F. Day, one of the promoters of the railroad between Smithfield and Portsmouth, informs the Manufacturers' Record that this line is intended for local business and the company promoting

it is independent of any railroad now in operation. If built, a bridge across the Nansemond river will be required.

Swanton, Md.—H. E. Clark, one of the promoters of the railroad between Swanton and Bittinger, writes the Manufacturers' Record that the company expects to build about twelve miles during the coming summer. It will be a lumber line, and connect with the Baltimore & Ohio. Mr. Clark may be addressed at Glen Campbell, Pa.

Tallahas, Ga.—It is reported that M. Brice is building a railroad seven miles long to connect with the South Georgia Railroad at Baining, Ga.

Washington, D. C.—Plans are being completed for the proposed terminals of the Baltimore & Ohio Railroad in the city, which will include considerable elevated work consisting of steel bridges and walls of masonry. William T. Manning, at Baltimore, is chief engineer of the company.

Washington, D. C.—The Herndon & Aldie Railroad Co. is promoting a bill in the Maryland legislature giving it authority to build a railroad in Maryland. [It is understood this company has been organized to build a line connecting the Baltimore & Ohio system with some Southern road in Virginia by constructing another bridge across the Potomac river and approaches to it. It has a charter in Virginia. It is reported that L. T. Michener, of Washington, is interested in the matter.]

Waycross, Ga.—It is stated that Messrs. J. S. Bailey & Co. have purchased the Waycross Air Line Railroad and will extend it from Nichols, Ga., to Douglas, Ga., a distance of twelve miles. The Waycross Railroad is thirty miles long and connects with the Plant system. J. S. Bailey & Co. are extensive lumber dealers, with headquarters at Douglas.

Street Railways.

Birmingham, Ala.—G. M. Williams, manager of the Birmingham Traction Co., informs the Manufacturers' Record that the North Birmingham Railroad, recently bought, will be rebuilt with 60-pound rails. It will probably be equipped with electric motors.

Charleston, W. Va.—The electric railway being built in Charleston will be completed about April 1. M. Weaver is superintendent of the company. W. W. Hazzard, of Cleveland, O., is one of the promoters.

Chattanooga, Tenn.—The city council is considering an ordinance giving the Chattanooga Street Railway Co. authority to build extensions on several streets in the city. J. H. Warner is president of the company.

New Orleans, La.—It is stated that track-laying has begun upon the Orleans & Jefferson Railway and that it is to be completed from New Orleans to Lake Ponchartrain by June 1. John Shanahan is superintendent of the construction.

Pensacola, Fla.—The Pensacola Street Railroad Co. expects to have the principal portion of its electric line in the city completed by April 1. Rolling stock is now being received. William H. Bosley, at Baltimore, is president of the company.

Pine Bluff, Ark.—The city council has decided to ask for bids for constructing a street railway, also an electric-light plant in the city. The bids will be received until March 15 by the board of public works.

Raleigh, N. C.—The proposed railway in the suburbs of the city will probably be operated by animal power and will be used for hauling stone. It will be about two miles long. Mayor Russ will give further information.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bank Fixtures.—T. H. De Saussure, engineer State Lunatic Asylum, Milledgeville, Ga., wants to contract for a fireproof vault in which to store books, etc.

Bicycles, Haversacks, Pliers and Scissors.—War Department, Signal Office, Washington,

D. C.—Sealed proposals, in duplicate, addressed to the disbursing officer, signal office, will be received until April 1 (at which time and place they will be opened in the presence of bidders) for furnishing five bicycles; forty-eight haversacks, canvas; forty-eight pliers, flat nose, six-inch; thirty-six scissors, best steel, seven and one-half-inch. Proposals must be inclosed in sealed envelopes marked "Proposals for Bicycles." United States reserves right to reject proposals; A. W. Greely, chief signal officer.

Boiler and Engine.—C. M. Nalls, Amsterdam, Va., wants to buy a 10-horse-power engine and 50-horse-power boiler.

Boilers and Engines.—See "Power-transmission Machinery."

Bridge.—Clarksville Toll Bridge Co., Clarksville, Va., will soon ask for bids on construction of bridge. Address W. D. Blanks.

Building Materials, etc.—Commissioners of Pulaski county, Georgia, want to buy windows, inside blinds, etc., for courthouse. Address T. J. Holder, clerk, Hawkinsville, Georgia.

Canmaking Machinery.—C. M. Nalls, Amsterdam, Va., wants to buy canmaking machinery.

Canning Machinery.—W. B. Bell & Co., Elkin, N. C., want catalogues of canning machinery.

Canning Machinery.—E. W. Warburton, Williamsburg, Va., wants estimates on canning machinery.

Canning Machinery.—C. M. Nalls, Amsterdam, Va., wants to buy capping machines, canmaking machinery, 50-horse-power boiler, pulp rubber, 10-horse-power engine, two jacket kettles of 120 gallons capacity.

Canning Machinery.—Arthur Denmead, Williamsburg, Va., wants to buy canning equipment.

Cement.—United States Engineer Office, 537 Congress Street, Portland, Me.—Sealed proposals for about 6000 barrels Portland cement and 3000 barrels natural cement will be received until March 31. Information furnished on application to R. L. Hoxie, major, engineers.

Chair Factory.—See "Woodworking Machinery."

Clothing Machinery.—E. K. Bryan, Jr., Danville, Va., wants information regarding the manufacture of overalls and estimates on machinery for same.

Conveying Machinery.—J. H. Souther, Iowa Park, Texas, wants hoist, dump, etc., for grain elevator. (See "Grain Elevator.")

Corn Mill.—Richter, Lamia & Co., Greenville, Texas, will want corn-meal machinery and flour mill. (See "Flour and Meal Mill.")

Cotton Mill.—E. W. Lemon, Acworth, Ga., wants information regarding cotton mills, estimates on cost of equipment, etc.

Cotton Mill.—J. W. Glyens, Fountain Inn, S. C., wants estimates on machinery for \$50,000 yarn mill, to have 3000 to 6000 spindles.

Divining Instrument.—G. W. Tarwater, Gadsden, Ala., wants to correspond with maker of the X-rays divining instrument for locating minerals.

Electric-light Plant.—J. D. Williams, Mount Olive, N. C., will receive estimates on electric-lighting plant of 400 lights.

Electric-light Plant.—Labbe & Gardemal, St. Martinville, La., want bids for 300-candle-power incandescent and twenty-five 1200 arc lamps; give cost of operating; terms cash.

Electric-light Plant.—R. G. Andrews, president Winnsboro Electric Light & Power Co., Winnsboro, Texas, wants a 600 or 700 16-candle-power light dynamo and engine to operate it; will expend \$3000.

Fiber-testing Apparatus.—W. A. Dunning, Hyattsville, Md., wants to correspond with manufacturers of "fellings" for testing fiber.

Fireproof Vault.—See "Bank Fixtures."

Flour and Meal Mill.—Richter, Lamia & Co., Greenville, Texas, will want flour mill and corn-meal machinery.

Gas Engine.—The Osborn Machinery Co., Clarksburg, W. Va., is in the market for a seven-horse-power gas engine; new or second-hand.

Gasoline Engine.—J. H. Souther, Iowa Park, Texas, wants gasoline engine. (See "Grain Elevator.")

Gates.—H. B. Orr, 128 Park Place, Macon, Ga., wants to correspond with manufacturers of gates of approved designs.

Grain Elevator.—J. H. Souther, Iowa Park, Texas, wants plans for grain elevator for wheat and oats, especially the latter; elevator to have capacity of about five car-

loads, including wagon scales, dump and hoist, gasoline engine, etc.

Heating Apparatus.—Heating apparatus will be wanted for \$20,000 church at La Grange, Ga. Address "The Pastor," Methodist Church.

Heating Apparatus.—Proposals will be opened April 1 for installing heating and ventilating apparatus in the new courthouse at Baltimore. Plans and specifications can be seen at office of inspector of buildings, City Hall, Baltimore; of Wyatt & Nolting, architects, at 4 East Lexington street, or at Builders' Exchange rooms. For further particulars address Henry D. Harlan and Robert H. Smith, sub-committee, Baltimore, Md.

Ice Machinery.—E. J. Mickler, Paris, Texas, wants to obtain prices on ice machinery, complete plants, etc.

Iron Fencing.—C. H. Mahew, Elberton, Ga., wants to buy iron fencing; will need large quantities; wants catalogues, prices, etc.

Iron and Wire Work.—See "Gates."

Machine Tools.—H. B. Orr, Macon, Ga. (128 Park Place), wants to correspond with manufacturers of pipe wrenches.

Machine Tools.—S. W. Reams, Box 221, Spartanburg, S. C., wants to buy lathes, shapers, planers, etc.; second-hand will do.

Power-transmission Machinery.—E. M. Hodges, Kinston, N. C., wants estimates on Corliss engines, boilers, shafting, pulleys, hangers, belting, etc.; fire pumps, condensing apparatus, etc.; will likely buy compound Corliss condensing engine, 150 horse-power, tandem pattern, same to be so built that by adding another engine to same shaft and flywheel power may be doubled.

Pumps.—See "Power-transmission Machinery."

Pumps.—Mississippi River Commission, 2732 Pine Street, St. Louis, Mo.—Sealed proposals, in triplicate, for furnishing two duplex steam pumps, each of 2000 gallons capacity per minute, will be received until March 26 and then opened. Information on application to H. E. Waterman, captain engineers, secretary.

Railway Equipment.—H. A. Ford, Ocala, Fla., wants to buy a three-foot-gauge dummy engine.

Railway Equipment.—H. Dudley Coleman Machinery Co., New Orleans, La., wants to buy (at dealers' prices) a second-hand steam locomotive or dummy for 36-inch-gauge track of sufficient capacity to draw on a straight level twenty cane cars, five tons capacity each; coal for fuel. Also wants 30-pound rails for two miles of track.

Railway Equipment.—George O. Griffith, Bald Knob, Ark., wants to buy a railroad coach.

Sewerage.—"The Sewerage Commission" will receive sealed proposals for the construction of the new sewerage system of Newport News, Va., up to March 31, when they will be opened and contract awarded; each bidder to accompany proposal with certified check for \$5000, payable to city treasurer. The work to be done, according to the plans, is, approximately, the laying of 55,000 feet of eight-inch tile pipe sewer, 8440 feet 10-inch pipe, 5140 feet 12-inch pipe, 4500 feet 15-inch pipe, 1945 feet 20-inch pipe, 884 feet 24-inch pipe, 2365 feet of 30-inch pipe, all of which is to be tile piping; 1500 feet eight-inch cast iron force main and 2600 feet of 10-inch cast iron force main and 500 feet 18-inch cast iron outlet pipe and 800 feet of 24-inch cast iron outlet pipe. There is to be a power-house, two centrifugal pumps, having a capacity of 1000 gallons per minute, to be run by two gasoline engines; manholes to the number of 147 and nineteen lamp-holes; sixty flush tanks will also be built. The cost of the new sewers must not exceed \$75,000, that being the amount the city is authorized to expend.

Steam Shovel.—"L. G. S. S." care of Manufacturers' Record, wants a steam shovel (Little Giant); in writing state price, condition, number and location.

Sugar Mill.—"Sugar Mill," care of Manufacturers' Record, wants a sugar mill, five or five and one-half feet, with gearing, thirty-four to thirty-six inches.

Tailoring Supplies.—Trix Tailoring Co., 545 Broadway, Augusta, Ga., wants to buy tailoring supplies.

Telephone Equipment.—West Virginia Telephone Co., West Union, W. Va., wants switchboards, telephone wire, brackets, crossarms, insulators, telephones, instruments, etc.

Telephone Equipment.—The Alvin & Angleton Telephone Co., F. J. Bush manager, wants bids on furnishing pine poles twenty-two feet long, six inches at butt and four inches at top, 800 in number. (Doubtless

the company will want instruments, wires, etc.)

Telephones.—J. R. Torbert, Society Hill, Ala., wants to buy telephones.

Vacuum Apparatus.—"Vacuum Apparatus," care of Manufacturers' Record, wants to buy a second-hand vacuum apparatus for concentrating aqueous liquids; capacity for evaporating to be thirty gallons per hour.

Water Purification.—The Henderson Water Co., Henderson, N. C., will open bids March 21 for plans or apparatus for removing offensive odors from the water of the company's system; 30,000 gallons daily now used. For particulars address J. H. Biedgers, treasurer.

Water Works.—See "Water Purification."

Wooden Packages.—Turner & Co., Scranton, Miss., want to buy wooden packages for shipping oysters in bulk.

Woodworking Machinery.—H. A. Rankin, Fayetteville, N. C., will want a double-end tenoner and an improved mortiser.

Woodworking Machinery.—Cameron & Barkley Co., Charleston, S. C., is in the market for machinery for manufacturing spools.

Woodworking Machinery.—The Carlin Furniture Co., 1365 Market street, Chattanooga, Tenn., will be in the market for chair machinery.

Woodworking Machinery.—G. G. Roberts & Co., Dyersburg, Tenn., wants to buy machinery for manufacturing rims and hubs; second-hand machines preferred.

Woodworking Machinery.—Seward Trunk & Bag Co., Petersburg, Va., wants to buy machinery for veneer works to cut one-sixteenth to three-eighths thick, twenty-four to forty long.

Woodworking Machinery.—Frank P. Petway, Elizabeth City, N. C., wants prices on two saw tables, with countershafts attached to back end; splitting saws for hardwoods, feet speed machines, buzz planer, a variety lathe, irregular molder, two spindles, pony saw mill, 40-inch saw, head block not more than three feet apart, short carriage and short track, to cut hickory blocks ranging from three to five feet long; thirty-two feet of 2½-inch shafting, five hangers, belting, 12, 10, 4 and 2½-inch; second-hand machinery wanted at once.

TRADE NOTES.

Electric-light Plant.—A good second-hand electric-lighting plant, suitable for factory or small town, is being offered for sale by G. H. J., care of Manufacturers' Record.

Ball Engines.—On account of the great demand for Ball engines for electric-light and power purposes, the works of the Ball Engine Co., Erie, Pa., have been operated night and day since September last.

New Factory.—Messrs. Dietz, Schumacher & Boye, Cincinnati, O., are now occupying their new factory at the corner of Queen City avenue and Buck street, where they will fill all orders promptly for their line of machine tools.

A Door Machine.—The Egan Company, of Cincinnati, O., has just introduced a power feed door clamp for dowel doors. Manufacturers of such doors will be interested in the machine, and can obtain further information regarding it by applying to the maker.

Crescent Brass and Iron.—The New York office of the Crescent Brass & Iron Co., of Detroit, Mich., has been removed to 127 Duane street. Frederic Klages represents the company in New York, and will be pleased to see his friends in the new quarters. Mr. Klages carries a full line of photograph frames, mirrors, inkstands, candlesticks and toy banks, besides other brass and iron specialties, on exhibition.

The Cincinnati (O.) Street Railway Co. has closed a contract with the General Electric Co. amounting to over \$100,000, covering the necessary electrical apparatus to enable the Cincinnati Company to change that portion of its system now driven by cable to an electric system. The Boston Elevated Railway has also placed a contract with the General Electric Co. for electrical apparatus amounting to the same sum.

More Orders from Europe.—The Davis & Egan Machine Tool Co., of Cincinnati, O., has received an order for lathes, shapers and heavy screw machines to be used by the Holland government; also received orders for lathes, drill presses, planers and shapers for Greenwood & Batley, machine-tool builders and government contractors, at

Leeds, England. Business in America is also improving, the company having secured a number of large orders last week.

Sheet Metal Working Machinery.—The co-partnership heretofore existing as the Niagara Stamping & Tool Co. has been changed to the Niagara Machine and Tool Works, of Buffalo, N. Y. The continually increasing demand for the manufacture of the company's tools and machines made this step advisable, especially as the stamping line was continued some time ago. Tinsmiths' tools, squaring and rotary shears, presses, dies and special machinery will be made a specialty.

Recent Sales.—Recent sales of the National Pipe Bending Co., New Haven, Conn., include the following: Two hundred horse-power, Boyd Smith, Mineral City, Va.; 500 horse-power, Thomas Oakes & Co., Bloomfield, N. J.; 150 horse-power, Plant Investment Co., Port Tampa, Fla.; 200 horse-power, Greenville, Ala.; 125 horse-power, Rock Hill Electric Light Co., Rock Hill, S. C.; 200 horse-power, Tennessee Chemical Co., Nashville, Tenn.; 800 horse-power, Memphis Ills. Light Co., Memphis, Tenn.

Expanded Metal.—The business which has been conducted in New York city for the past nine years under the name of the Central Expanded Metal Co. will hereafter be conducted by the New York Expanded Metal Co., an organization chartered under the laws of New York State. This change is made for the purpose of enabling the constantly increasing business to be conducted with greater advantage, handling only expanded metal and such kindred materials as may be necessary; Walter Chess, president, and Merrill Watson, treasurer and manager; office 256 Broadway.

American Ship Windlass.—The frequency with which disabled ships have been reported recently makes the presence of a towing machine on all vessels all the more advisable, especially in view of the remunerative rewards which salvage laws award. A really automatic and practical machine for towing is the Shaw & Spiegle machine, manufactured by the American Ship Windlass Co., Frank S. Manton, agent, Providence, R. I., who will promptly send full particulars of its methods of working, prices, etc., to any inquirer. The machine adjusts the strain so steadily, by steam cushions, that there are no jerks or jars in towing which cause the snapping of lines and straining to pieces of the vessels. It winds in the slack as the tow comes up and pays it out again easily up to the necessary strain as she falls off. All this is done automatically, and it is claimed there never yet has been a case of these machines failing to accomplish their designed purpose.

General Engineering Business.—The organization is announced of the Bacon Air Lift Co., American Surety Building, 100 Broadway, New York city. This company intends to engage in a general water supply and hydraulic engineering business, making a specialty of the application of compressed air for pumping water and all kinds of liquids. The control of the production of the Bacon air lift pump is now the exclusive property of the Bacon Air Lift Co., together with valuable patents issued to George R. Young and Clifford Shaw, whereby the usefulness of such pumps is greatly broadened and the cost of operation lessened. The officers of the company are: E. S. Hosmer, president; C. E. Buck, vice-president; J. E. Bacon (who has made a special study of water-supply problems), secretary; John T. Gibson (for years connected with the George F. Blake Manufacturing Co.), treasurer, and Clifford Shaw (who has wide experience in the erection of plants) will be superintendent of construction. Illustrated catalogue is now in preparation and will be mailed on application.

Something on the Paint Problem.—There is now being submitted to the trade samples of an approved method of metal protection. The sample cards show steel plates covered with one and two coats, just as it comes from the barrel. No. 400 is an ideal priming paint, and No. 500 is no less for field coats. They combine a perfect system of painting, giving the work two coats of a non-metallic pigment paint, and leaving it free for the safe use of any finishing color if desired. With reference to the "Metal Protector," the National Paint Works, manufacturer, Williamsport, Pa., desires to emphasize one or two very special claims. (1) The use of linseed oil, made from Calcutta seed, such as used for the best grades of varnish; (2) of Egyptian asphaltum, which is harder and better than other grades and

costs three times as much; (3) wax and copal gums of the highest grades, and in this preparation there is not one drop of benzine. The National Company furnishes paints in all colors and especially adapted to the service required, in which the main constituents (carbon, graphite, asphaltum, oxide of iron, zinc, lead, gums, linseed oil and Japan) are certified as to quality and proportions. Samples of pure red lead and pure graphite paints, also full line of colors, will be sent on application.

TRADE LITERATURE.

McGowan's Poster.—A handsomely illustrated poster, containing illustrations of a large number of the machines made by the John H. McGowan Co., of Cincinnati, O., has been issued. The company makes pumping machinery for every service.

Water-works Supplies, etc.—A poster illustrating some of the stop and waste cocks, tapping machines, brass plugs, couplings, etc., made by the H. Mueller Manufacturing Co., of Decatur, Ill., has been received. This company carries a general line of plumbers' and water-works supplies.

Steam Pumps Catalogue.—Illustrated catalogue No. 12 of the Gardner Governor Co., of Quincy, Ill. (not Florida, as erroneously given in our last issue), has been issued. The company's line of products includes duplex steam pumps, steam-engine governors, pump governors, balanced valves, pressure reducers, angle valves, globe valves, etc.

Calendar.—Messrs. Thompson & Bushnell, 122 Liberty street, New York, have issued a very neat calendar on which are reproduced some cards taken from steam engines which are very suggestive. Send for one. The firm reports a constantly increasing demand for the Racheider adjustable spring indicator and ideal reducing wheel, having booked an exceptionally large number of orders during the past month.

"Our First Shot."—A tag received from the W. S. Haines Co., of 136 South Fourth street, Philadelphia, Pa., has on one side the sentence "Our First Shot," then follows the name of the firm addressed. Attached to the card by a string is a round shot. The company states on the other side of the card that pipes stay clean—clean-hot, if the Heintz steam trap is used where it's needed. Send for booklet telling why over 75,000 of these traps were used last year.

Fire-department Supplies.—A most complete line of hose and fire-department supplies generally is treated upon and illustrated in the catalogue of the Fabrie Fire Hose Co., of 68 Murray street, New York city. This company is enabled, as the result of its experience in the production of a general line of such equipments as fire departments require, to supply the most practicable and best-made goods in this class. Send for catalogue, if interested.

A Successful Conduit.—A circular of the "Loricated" electric conduits, unlined, is now being issued by the manufacturers of the system. The circular shows that the Safety Conduit Co., of Rankin Station, Pa., is engaged in the manufacture of iron and steel armored conduits for interior construction, its particular conduit being approved by the National Board of Fire Underwriters for use all over the United States. The company has installed the system in a large number of buildings in Pittsburgh and vicinity and proven the worth of the "Loricated." A large contract which the Safety Conduit Co. now has on file is to supply conduit system for the new postoffice building at Washington, D. C., which will consist of over 100,000 lineal feet.

Iron Markets.

Cincinnati, O., March 5.

For Southern iron the market has been very quiet during the past week. It has been stated that the bulk of the orders placed have gone to two furnace companies in the South, who are said to be shading the current quotations, and some exceedingly low prices have been reported. The representatives of the furnaces, however, deny having made deep cuts, and say that as soon as orders are booked for certain grades their prices will be as high as anyone else.

The full in demand need give rise to no apprehension, for consumption is going

on at an enlarging rate, and numerous consumers are asking for shipments faster than deliveries specified in contracts. For the first time in several years foundries have been so well supplied with orders for castings that they are able to assume an independent attitude. During the period of depression contractors for machinery castings especially had become more and more critical and had rejected work that formerly was accepted without question. Foundrymen feel that the limit has been reached, and that in self-defense they must rebel when requirements are undoubtedly too severe. They recognize that cast iron has its limitations, and in several instances have told their customers that rather than grant concessions they would prefer to have the patterns taken away. It is quite common now to hear a foundryman say that he has so much work on hand that he is obliged to turn down orders.

In Lake Superior charcoal irons the tendency is toward higher prices. Nearly all the makers of this class of material have discovered that the recent scramble for orders was an unwise one, and that sales were made at less than the cost of replacing the iron. Current prices are from 75 cents to \$1 per ton above the lowest that have been made.

Some of the largest producers of finished product profess to believe that the possibility of war with Spain will have a paralyzing effect on business for several months, but that later in the year there will be a recovery with an unprecedented volume of trade. Others, and we think with more reason, take the view that nothing is in sight to interfere with the largest consumption of pig iron that has been known in our history at prices fairly profitable to the producers.

We quote for cash f. o. b. Cincinnati:

Southern coke, No. 1 foundry	\$9 75@10 00
Southern coke, No. 2 foundry	9 50@ 9 75
Southern coke, No. 3 foundry	9 25@ 9 45
Southern coke, gray forge	8 75@ 9 00
Southern coke, mottled	8 75@ 9 00
Southern coke, No. 1 soft	9 75@ 10 00
Southern coke, No. 2 soft	9 50@ 9 75
Belfont coke, No. 1, Lake Sup.	11 00@ 11 50
Belfont coke, No. 2, Lake Sup.	10 50@ 10 75
Hanging Rock charcoal, No. 1	14 50@ 15 50
Tennessee charcoal, No. 1	12 50@ 13 00
Jackson Co. silvery, No. 1	12 50@ 13 00
Standard Georgia car-wheel	14 25@ 15 00

ROGERS, BROWN & CO.

Literary Notes.

The leading features of Harper's Magazine for March are "An American Army Manoeuvre," by Franklin Matthews, illustrated by Frederic Remington and R. F. Zogbaum; "Social Pictorial Satire"—Part II, by George du Maurier, illustrated by drawings from Punch, and by portraits of Charles Keene and Geo. du Maurier; "Stirring Times in Austria," an account by Mark Twain of the recent disorders in the Austrian Parliament, of which the author was a constant and critical spectator, illustrated by Clifford Carleton, T. de Thulstrup and Harry Fenn; "The Traditional Policy of Germany in Respect to Austria and Turkey," an explanation by An Eastern Diplomat of the origin of the troubles Mark Twain describes; "In the Wake of a War," by Julian Ralph, illustrated from sketches made by Lester Ralph; "The Earliest Painter in America: Recently-discovered records of Gustavus Hesselius and of our First Public Art Commission," by Charles Henry Hart, illustrated by engravings of Hesselius's portraits of himself and his wife; "Reminiscences of Eminent Lecturers," by Joel Benton, illustrated by engravings; "The Century's Progress in Anatomy and Physiology," by Henry Smith Williams, M. D., richly illustrated, and "Our National Seminary of Learning," an account by Prof. W. J. McGee, of the forces which are tending toward the making of a university at Washington.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Richmond Corporation.

The Richmond Trust & Safe Deposit Co., recently referred to in the Manufacturers' Record, has completed its organization by electing the following officers: President, John Skelton Williams; first vice-president, James W. Allison; second vice-president, James H. Dooley; secretary and treasurer, Henry L. Cabell. Although the public was invited to subscribe for \$300,000 worth of stock, within twenty-four hours after the books were opened subscriptions to the amount of \$500,000 worth had been received. This indicates the popularity of the company in Richmond and is a high compliment to the gentlemen who are its promoters.

March Disbursements.

The following interest disbursements are payable March 1 by Southern railroad corporations: Baltimore, Chesapeake & Atlantic 5s \$31,250; Chesapeake & Ohio 5s \$85,175, 4½s \$559,000; Illinois Central 4s \$16,000, 5s \$58,650; Kansas City, Memphis & Birmingham 6s \$15,000, 7s \$40,000, 4s \$63,000; Louisville & Nashville 7s \$19,000; Missouri, Kansas & Texas 5s \$67,000; Missouri Pacific 5s \$645,000; Mobile & Ohio 4s \$180,500; Norfolk, Virginia Beach & Southern 5s \$12,500; Northeastern Railroad 8s \$45,000; Roanoke & Southern 5s \$51,000; St. Louis & San Francisco 6s \$60,000; Southern Railway 5s \$22,500, 4s \$242,700; Texas & New Orleans 6s \$77,000; Texas & Pacific 6s \$113,500; Virginia Midland 6s \$108,000, 5s \$44,000, 4s \$33,000.

Southern Railroad Dividends.

The following dividends by Southern railroad companies are payable in March: Atlanta & Charlotte Air Line 3 per cent., \$51,000; Atlantic Coast Line 2½ per cent., \$125,000; Illinois Central 2½ per cent., \$1,312,500; North Carolina Railroad, \$120,000.

New Corporations.

The Bank of Gravett, Ark., has been formed, with J. Mauwaring as president, and \$25,000 capital.

The Millers' Mutual Insurance Co. has been formed at Fort Worth, Texas, by Ben O. Smith, G. Walker and others.

The Cowperthwait Loan Co. has been organized at St. Louis, Mo., with \$10,000, by Samuel B. Rowe, C. H. Jones and others.

The Chesterfield (S. C.) Banking Co., recently formed, has elected E. N. Redfern president and G. J. Redfern secretary and treasurer.

The Phoenix Benefit Association has been formed at Spartanburg, S. C., with \$250,000, by Horace L. Bomar, J. L. Whatley and others.

The Bank of Gloster has been formed at Gloster, Miss., with \$25,000. G. H. Barney is president; W. D. Johns, vice-president, and M. D. McLean, cashier.

The Co-operative Loan Association has been formed at Wilmington, N. C., with the following officers: President, Walker Taylor; vice-president, W. A. Johnson; attorney, George L. Peschau; secretary and treasurer, T. H. Wright.

The Plater-Wrenne Banking Co. has been formed at Nashville, Tenn., suc-

ceeding the firm of Thomas Plater & Co. The following officers have been chosen: President, Thomas Plater; vice-president, T. W. Wrenne; cashier, Richard C. Plater.

New Securities.

The town of West Point, Miss., may issue \$10,000 worth of bonds for improvements. Address the mayor.

The town of Calhoun, Ga., will vote March 26 on a proposed issue of \$12,500 in bonds. Address the town clerk.

An election will be held on March 22 relative to issuing \$25,000 worth of 6 per cent. bonds by the town of Webster Grove, Mo.

The E. M. Moreland Co. has negotiated the sale of \$70,000 worth of railroad bonds issued by the town of Darlington, S. C.

The city of Roanoke, Va., will receive bids until March 15 for \$26,000 worth of its 6 per cent. school bonds. The mayor may be addressed.

Tucker county, West Virginia, will vote on March 29 on an issue of \$30,000 in courthouse bonds. W. M. Cayton, at Parsons, W. Va., will give further information.

The sinking fund commissioners of Louisville, Ky., have sold \$64,000 worth of 5 per cent. bonds to the Citizens' National Bank of that city at a premium of \$2685 and interest. The German Insurance Co. has purchased \$10,000 at a premium of 2.8 per cent. and interest.

Dividends and Interest.

The Bank of Millen, Ga., has declared a semi-annual dividend of 4½ per cent. Seventeen per cent. has been added to its surplus fund. During the year the net profit was 26 per cent.

The Bonsack Machine Co., of Lynchburg, Va., announces that it will pay the following dividends during the following year: Twelve per cent. on June 1, 6 per cent. on September 1 and 6 per cent. on December 1, making 24 per cent. in all.

Financial Notes.

The American Land Association, of Ellicott City, Md., has been authorized to loan money and do a general financial business.

J. R. Boyd has been elected cashier of the Farmers and Merchants' National Bank of Huntsville, Ala., succeeding E. H. Andrews.

The York Road Building Association has been incorporated by William F. Fink, Ernest Hoen and others, of Baltimore. The capital is \$300,000.

The annual report presented at the recent meeting of the Savings & Trust Co. of Wilmington, N. C., showed that the profits of the year were 13 per cent. on its capital stock. The depositors have been paid \$12,000 in interest during this period.

The Maryland Title Insurance Co. of Baltimore has elected the following board of directors: Messrs. Alexander Brown, Louis M. Duvall, Thomas Hill, Walter W. Abell, Jesse Hilles, Edgar G. Miller, Elisha H. Perkins, John A. Tompkins, George Whitelock, John A. Whitridge and Thomas K. Worthington.

The Edison Electric Co. of New Orleans have one of the handsomest plants in the South. In fact, there is none better; equipped with all the late appliances, among which they have just had completed two suspension boiler-room scales of the latest design, erected by Mr. F. F. Bradway, agent at New Orleans. Parties in need of such scales would do well to address Mr. Bradway, who makes this class of scales a specialty.

To Manufacturers.

As export agents of a large number of Southern cotton mills, we have extensive connections all through Santo Domingo, English West Indies, Central and South America, as well as Australia, Africa and Europe. Many of our customers take an interest in other American products, and it is therefore our intention to secure the representation of some of the most important manufacturers in such lines, with the understanding to represent only one in each line. For the purpose of extending our foreign business we have a staff of travellers and resident agents in the different countries, and we pay the manufacturers for all orders secured by them, carrying the accounts of the buyers, to whom, in many instances, long credits have to be granted. Our travellers and resident agents have a full line of samples of the goods we now handle. We only accept accounts where we are the sole agents.

If you are interested in the export business, we would be pleased to quote you our terms and conditions and give you satisfactory references.

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TO CONTRACTORS.

If you have any municipal bonds or warrants, taken in payment for building waterworks, court or school houses, jails, etc., write us. Conditions being favorable, we can use them.

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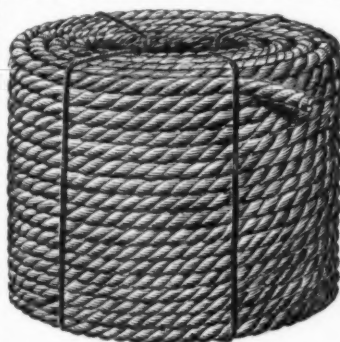
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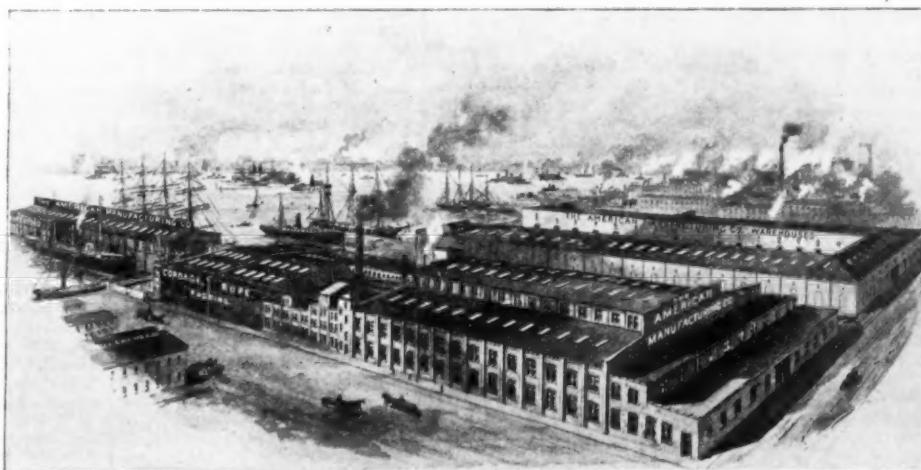
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Crompton & Knowles Loom Wks.	29	
Crunk Hanger Co.	29	
Crosby Steam Gage & Valve Co.	15	
Crouse-Hinds Electric Co.	36	
Curtis & Marble Machine Co.	29	
Cutler Mfg. Co.	6	
Cypress Lumber Co.	19	
D		
Dalzell & Co.	22	
Dana, W. K.	20	
Davis & Egan Mch. Tool Co.	12	
Davis Coal & Coke Co.	30	
Davis-Farrar Co.	14	
Davis, Franklin F.	6	
Davis, G. M., & Son	19	
Dean Bros. Steam Pump Works	32	
De Loach Mill Mfg. Co.	27	
Dempwolf, C. H., & Co.	†	
Dessau, S. Co.	†	
Detroit Lubricator Co.	9	
Diston, Henry, & Sons	†	
Dixon, Jos., Crucible Co.	38	
D. J. R.	20	
Dopp, H. Wm., & Son	18	
Dow Wire Works Co.	24	
Draper Co.	28	
Draper Machine Tool Co.	12	
Dufur & Co.	34	
Dunbar, R., & Son	34	
Dunning, W. D.	19	
E		
Easton Burnham Machine Co.	29	
Eccles, S., Jr.	*	
Eckford, J. W.	20	
Eco Magneto Clock Co.	19	
Egan Co.	*	
Electrical Engin'ing & Supply Co.	37	
Ellis & Helfenberger	24	
Empire Paint & Roofing Co.	24	
Engineering News Publishing Co.	6	
Ennis, C. W.	*	
Ensler, Eugene F.	31	
Epping-Carpenter Co.	33	
Erikson, Edward E.	21	
Etting, Edward J.	21	
Eureka Fire Hose Co.	10	
Everson, B. M.	21	
Exchange Banking & Trust Co.	19	
F		
Fairmount Machine Co.	28	
Farquhar, A. B., Co., Limited	26	
Fay, J. A., & Co.	27	
Fay Manila Roofing Co.	25	
Featherstone's, John, Sons	16	
Fernandina Oil & Creosote Works	12	
Fifield Tool Co.	22	
Fitz-Hugh & Co.	21	
FOUR, A.	22	
Foss Gas Engine Co.	14	
Foss Mfg. Co.	34	
Forbes, W. D., & Co.	15	
Forsyth, S. C., Machine Co.	26	
Fort Wayne Electric Corporation	37	
Fossick Co., T. L.	6	
Fox Portable Elevator & Rack Co.	6	
Frank, Halberstadt & Co.	129	
Fredericksburg Water Power Co.	8	
Freese, E. M., & Co.	24	
French, Saml. H., & Co.	24	
Frick Co.	14	
Froehling, Dr. Henry	6	
Frontier Iron Works	14	
Fuel Economizer Co.	9	
Fulton Steam Boiler Wks.	†	
Funkhouser, Saml	21	
G		
Galt, John, & Sons	25	
Gandy Belting Co.	11	
Garrett-Buchanan Co.	25	
Garrett, C. S., & Son	25	
Gary, James A.	19	
General Fire Extinguisher Co.	19	
G. H. J.	20	
Gilbert, C. M., & Co.	6	
Glaskin, George F., & Co.	6	
Globe Machine Works	16	
Golden's Foundry & Machine Co.	27	
Gowdey, J. A., & Son	28	
Graphite Lubricating Co.	21	
Grasty, Robt. Ware	31	
Gregory Co., (has E.)	21	
Grosse, L., Art Glass Works	24	
Guilfoix & Blanc	6	
H		
Haines, Jones & Cadbury Co.	38	
Haines, William S., Co.	38	
Hales & Ballinger	6	
Hall Steam Pump Co.	32	
Hammacher, Schlemmer & Co.	19	
Hanika, C., & Sons	24	
Hansell Spring Co.	13	
Harrington & King Perforat'g Co.	4	
Harrisburg Mfg. & Boiler Co.	16	
Hartford Steam Boiler Inspection & Insurance Co.	36	
Hartley's Boiler Works	15	
Hartzell Novelty Works	19	
Hayden, J. M., & Co.	10	
Hazard Mfg. Co.	4	
Help Wanted	31	
Hench & Dromgold	26	
Hendrick Mfg. Co., Limited	24	
Hickman, Williams & Co.	22	
Hierze, Theo., & Son	13	
High Point Machine Works	14	
Hirsch, L. K.	22	
Holder, T. J.	19	
Holmes, E. & B., Machinery Co.	26	
Holmes Fibre Graphite Mfg. Co.	*	
Holt, S. L., & Co.	27	
Homer, F. E., & Co.	37	
Hoopes & Townsend	23	
Howard, B. C.	6	
Hoves, S., Co.	13	
Humphreys Mfg. Co., The	33	
Huther Bros.	†	
Hutton Engineering Co.	6	
I		
India Alkali Works	28	
Ingersoll-Sergeant Drill Co.	18	
International Corres. Schools	6	
International & Gr. Northern Ry.	34	
Interstate Law Association	21	
J		
Jackson Mfg. Co.	23	
Janney & Steinmetz	21	
Jeffersonville Iron Works Co., Inc.	32	
Jeffrey Mfg. Co.	30	
Jenkins Bros.	38	
Jewell Belting Co.	11	
Johns, H. W., Mfg. Co.	25	
K		
Kearsley, G. T.	20	
Keeler, E. C.	9	
Kelly, O. S., Co., The	35	
Kelly & Jones Co.	*	
Kendrick Valve & Washer Co.	9	
Keystone Drop Forge Co.	9	
Kiechler Mfg. Co.	†	
Kilbourne & Jacobs Mfg. Co.	38	
Kilburn, Lincoln & Co.	28	
Klipstein, A., & Co.	28	
Knox, Henry E., Jr.	6	
L		
Lambert Hoisting Engine Co.	14	
Lane Manufacturing Co.	26	
Lathbury, Spackman & Bache	6	
Leffel, James, & Co.	33	
Lehigh Valley Brass Works	17	
Lewis, H. F., & Co., Ltd.	28	
Lidgerwood Manufacturing Co.	23	
Link-Belt Engineering Co.	30	
Lobdell Car Wheel Co.	10	
Lombard Iron Wks. & Supply Co.	9	
Lowell Machine Shop	25	
Lowell Textile School	†	
Ludlow-Saylor Wire Co.	24	
Ludlow Valve Mfg. Co.	33	
Lunkenheimer Co.	38	
Lyon, A. J., & Co.	*	
M		
Macfarren, S. J.	6	
Main Belting Co.	10	
Makepeace, C. R., & Co.	6	
Manistee Iron Works	33	
Marion Steam Shovel Co.	2	
Martin, Hy., Brick Mch. Mfg. Co.	18	
Maryland Mfg. & Construction Co.	36	
Maryland Trust Co.	129	
Mason Machine Works	28	
Mason Regulator Co.	32	
Maxwell, W. G.	20	
McClave, Brooks & Co.	9	
McCoy, Joseph F., Co.	10	
McCully, R.	35	
McDonald, John, & Sons	6	
McGowan, John H., Co.	32	
McKenna, David	†	
McLanahan & Stone	35	
Mead, Y. A., Cycle Co.	31	
Mecklenburg Iron Works	14	
Means & Fulton Iron Wks.	15	
Mercantile Trust & Deposit Co.	129	
Merchants & Miners' Transp. Co.	31	
Meyer, Dr. Otto	6	
M. F.	21	
Middendorf, Oliver & Co.	129	
Middletown Machine Co.	15	
Milburn, Frank P.	6	
Miles, Franklin S.	9	
Miller Bros. & Co.	6	
Mitchell Tempered Copper Co.	37	
Mitskun, M., & Co.	21	
Morse, Jones & Co.	9	
Morgan Spring Co.	24	
Morse Twist Drill & Mch. Co.	12	
Morse, Williams & Co.	17	
Mueller, H., Mfg. Co.	33	
Muirhead, John, & Sons	*	
Muirhead Machine Works	35	
Mandt & Sons	35	
Munson Bros.	10	
Murphy, John, & Co.	9	
Murray Iron Works Co.	14	
Murray, James, & Son	34	
N		
National Paint Works	24	
National Pipe Bending Co.	17	
National Roofing & Supply Co.	25	
New Atlantic Hotel	31	
New Columbus Bridge Co.	25	
New England Railroad	34	
N. J. Car Spring & Rubber Co.	11	
Newburg Ice Mch. & Engine Co.	17	
Newport News Shipbuilding & Dry Dock Co.	15	
New Rapid Dry Kiln Co.	27	
New York Equipment Co.	22	
Niagara Stamping & Tool Co.	*	
Nicholson File Co.	*	
Nordyke & Marmon Co.	35	
Norrish, Burnham & Co.	33	
North American Metaline Co.	23	
Northern Electrical Mfg. Co.	37	
Norton, C. H.	6	
Norton Emery Wheel Co.	13	
O		
Ober Lathe Co.	26	
Old, W. W.	21	
Otto Gas Engine Works	14	
P		
Pancoast, Henry B., & Co.	22	
Parkhurst Bros. & Co.	9	
Paxson, J. W. Co.	2	
Peacock, Geo.	22	
Pechin, T. E.	10	
Peck-Hammond Co.	*	
Penberthy Injector Co.	38	
Pettee Machine Works	29	
Phila. Machine Screw Works	*	
Philadelphia Steel Roofing Co.	25	
Phoenix Glass Co.	37	
Piqua Copying Machine Co.	31	
Pittsburg Feed-Water Heater & Engineering Co.	16	
Pittsburg Locomotive Works	*	
Pittsburgh Plate Glass Co.	25	
Playford Stoker Co.	17	
P. O. Box	21	
Pomona Terra Cotta Co.	19	
Porter, H. K., & Co.	13	
Ponitzer & Co.	21	
Powhatan Clay Mfg. Co.	6	
Pratt, N. P., Laboratory	6	
Pratt & Whitney Co.	12	
Price & Co.	22	
Price & Heald	22	
Priestman & Co., Inc.	15	
Providence Machine Co.	39	
Pulsometer Steam Pump Co.	32	
Q		
Queen City Printing Ink Co.	†	
Queen City Supply Co.	30	
R		
Radford, Va., Board of Trade	20	
Rand Drill Co.	32	
Rawson Electric Co.	37	
Record Printing House	†	
Reed, F. E., Co.	12	
Reid, Thorburn	6	
Reliance Gauge Co.	*	
Remington Machine Co.	16	
Rhoads, J. E., & Sons	11	
Ritter-Conley Co.	6	
Roanoke Navigation & Water Power Co.	20	
Robbins & Myers Co.	21	
Robertson, Jas. Mfg. Co.	34	
Robins, A. K., & Co.	9	
Robinson, J. M., & Co.	24	
Robinson, Wm. C., & Son	26	
Robinson & Orr	22	
Rossendale-Reddaway Belting & Hose Co.	11	

PROPOSALS.

THE County Commissioners of Pulaski County, Georgia, desire to purchase for courthouse windows, inside blinds; best material and latest styles wanted. For further information address T. J. HOLDER, Clerk, Hawkinsville, Ga.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., February 21, 1898.—Sealed proposals will be received at this office until 5 o'clock P. M. on the 1st day of April, 1898, and opened immediately thereafter, for all the labor and materials required for the foundation, superstructure, roof covering and approaches of the U. S. Custom House building at Portland, Oregon, in accordance with the drawings and specification copies of which may be had at this office or the office of the Superintendent at Portland, Oregon. JAMES KNOX TAYLOR, Supervising Architect.

PROPOSALS FOR FURNISHING STAMPED ENVELOPES AND NEWSPAPER WRAPPERS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., Feb. 25, 1898. SEALED PROPOSALS are invited, and will be received at this Department until 12 M. on Wednesday, the 30th of March, 1898, for furnishing stamped envelopes and newspaper wrappers in such quantities as may be called for by the Department during a period of four years, beginning on the first day of October, 1898. Proposals must be made on the blank forms provided by the Department, securely enveloped and sealed, indorsed "Proposals for furnishing stamped envelopes and newspaper wrappers," and addressed to the Third Assistant Postmaster General, Washington, D. C. Bids delivered in person must be handed in at or before the hour above specified for the receipt thereof; otherwise they will not be considered.

Blank forms of proposal, with full specifications and samples of the envelopes and wrappers, will be furnished upon application to the Third Assistant Postmaster General.

JAMES A. GARY,
Postmaster General.

PROPOSAL FOR FURNISHING ADHESIVE POSTAGE STAMPS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., Feb. 25, 1898. SEALED PROPOSALS are invited from parties carrying on the business of steel plate engraving and plate printing, or who have had experience in conducting that business, and will be received at this Department until 10 o'clock A. M., on Wednesday, the 30th of March, 1898, for furnishing adhesive postage stamps of the following-named classes, in such quantities as may be called for by the Department during a period of four years, beginning on the first day of July, 1898, viz:

- Ordinary postage stamps for the use of the public.
 - Newspaper and periodical stamps.
 - Postage-due stamps.
 - Special delivery stamps.
- Proposals must be made on the blank forms provided by the Department, securely enveloped and sealed, indorsed "Proposals for furnishing adhesive postage stamps," and addressed to the Third Assistant Postmaster General, Washington, D. C. Bids delivered in person must be handed in at or before the hour above specified for the receipt thereof; otherwise they will not be considered.

Blank forms of proposal, with full specifications, will be furnished upon application to the Third Assistant Postmaster General.

JAMES A. GARY,
Postmaster General.

Proposals for Heating Plant, etc.,
New Courthouse, Baltimore
City, Maryland.

Office of the Courthouse Commission,
City Hall, February 17, 1898.

Sealed proposals will be received at this office until 3 P. M. of April 1, 1898, and immediately thereafter opened, for the construction and installation of the boiler plant, heating and ventilating apparatus, water supply system, fire pump, &c., for the new Courthouse for Baltimore City, now in course of erection.

Copies of the drawings and specifications may be seen on and after February 28th, 1898, by those desiring to submit proposals at the office of the Inspector of Buildings, City Hall; at the office of the architects, 4 East Lexington St.; at the rooms of the Builders' Exchange, Baltimore; or a copy of the drawings and specifications will be furnished on application and payment of \$25, of which \$20 will be refunded upon return of the same complete. Each bid must be accompanied by a certified check for a sum not less than two per cent. of the amount of the proposal, made out to the order of the Mayor of Baltimore City.

The right is reserved to reject any or all bids, and to waive any defects or informalities in any bid, should it be deemed to the interest of the city to do so. All bids received after the time stated will be returned unopened.

BUILDING COMMITTEE OF NEW
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HENRY D. HARLAN,
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It costs only
15 Cents a
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Self Draining Hose Reel.

It will last twenty years and
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Automatic
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OF THE WORLD
in which the damage has been confined to
limited area, and minimum amount, show
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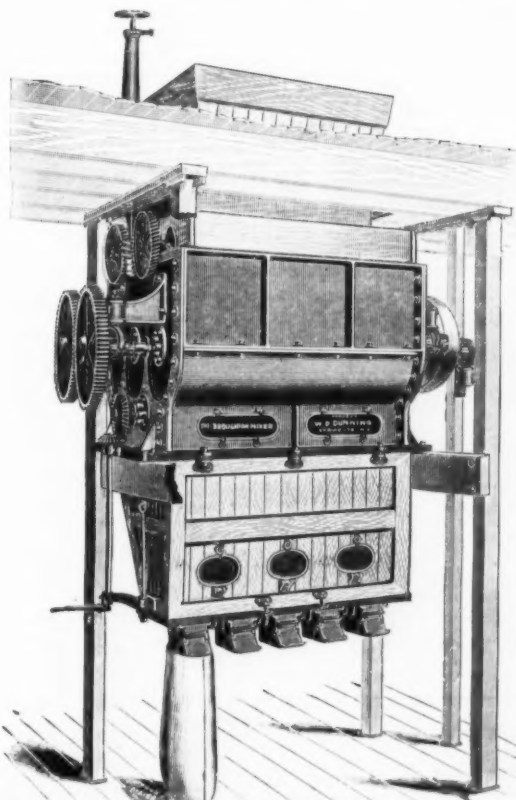
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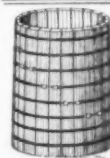
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ARTISTIC WORK.
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LOW PRICES.

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Temperate Climate. No Epidemic.
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Minimum Cost of all Building Material.

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COLUMBUS, GA.

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is a prosperous, enterprising and growing town in the heart of one of the most fertile and productive sections of the United States. Its possibilities are wonderful and by proper effort and push it can be made a manufacturing and commercial centre. Aberdeen

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Eastern Capital can find Capital in Aberdeen to help establish a big Cotton Mill in the centre of the Cotton Belt of Mississippi. Correspondence solicited. Write to

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VALUABLE COTTON MILL FOR SALE.

The undersigned offers for sale the
ROSALIE MILLS COMPANY'S PROPERTY
at Natchez, Miss.,
including buildings, tenements and
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Production 3000 pounds per day.
Machinery of latest design and in first-
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Parties desiring to start new enterprises or change location, are invited to investigate Radford, Va. Good climate, water and drainage, elevation, 1800 feet. On Norfolk & Western Ry. at junction of Columbus, O., and Pocahontas Coal Fields divisions, as well as Southern connection via Knoxville, Tenn. In midst of fine agricultural country and 25 miles from ore fields. Population, 4000, churches, public and private schools, electric light and car line. Ice plant and other manufactures.
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30 acres with ample buildings, one 100-horse-power steam engine and boiler. The above property is all new and is known as the Shreveport Fair Grounds. Address
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The third largest power in the United States, situated at WELDON, N. C., at the junction of the Seaboard Air Line and Atlantic Coast Line.

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This section is RICH in TIMBER and WOOD for manufacturing purposes, as well as for making acetate of lime of potash. Boats using 3½ feet water can go up the river from our power site for 30 miles, developing a valuable timber country that has not been penetrated.
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23 Howard & Bullough Roller Cards, 36", with
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Frames, 9x4½, 100 spindles each.
3 Saco Water-Power Roving Frames, 7x3½, 144
spindles each.
1 Howard & Bullough Roving Frame, 7x3½, 160
spindles.
5 Howard & Bullough Roving Frames, 7x3½, 144
spindles each.
4 Part Warp Mules, 1½ gauge, 700 spindles each.
4 Part Warp Mules, 1½ gauge, 600 spindles each.
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1 Payne Spooler, 4" gauge, 80 spindles.
1 English Spooler, 4" gauge, 368 spindles.
4 Howard & Bullough Warpers, 500 spools to
creel each.
2 Howard & Bullough Slashers, 82" copper cylinders.
Watts Campbell Co. Horizontal Corliss Steam
Engine, condensing; diam. of cylinder, 20";
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24 inches.
Set Roll Covering Tools.
14"x27"x12" Knowles Duplex Pump.
Set Phillips Dry Cans, 1 cylinder 6ft. x 84", 5 cylinders
3ft. x 24", with water rolls.
4 Butterworth Drying Cylinders, 42"x23".
1 Fales & Jenks Dry Twister, 200 spindles.
1 8½" Luther Wood Stretcher; 2 Luther Brass
Stretchers, 74"x13".
1 20" Risdon Water Wheel, 2½" Davis Regulator.
1 Cloth Doubler 1 Stott Silk Warper.
Oil Tanks, Vapor Pots, Steam Traps, &c.
1 48" and 1 60" Barney Fans.
4 Butterworth Drying Cylinders, 62"x23".
4 Granger Drying Cylinders, 108"x30".
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Capacity over 100 dozen a day. Has not been
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The knitting mill at Roanoke Rapids has been a wonderful success, and is now running night and day.

The South is beginning to feel the competition of her own cotton mills, but the knitting industry has there a comparatively free field, and this is the time to enter it with certainty of large profits.

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Parties desirous of starting such plant will hear about good territory from
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In the Piedmont section of North Carolina on the Southern Railway and the South Yadkin River. Full copy of engineers report sent on application.

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Second-hand. Good Condition.

1 "Worthington" Duplex Steam Pump,
14 x 8½ x 10. No. 62432.
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1 "Knowles," with receivers, Steam Pump,
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1 2000 H. P. Berryman Feed Water Heater.
Large assortment of Chapman and Ludlow Valves.

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The Cleveland, Lorain & Wheeling RAILWAY.

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The Buildings, which were erected specially for a Fertilizer Plant, are new and conveniently arranged. The

MACHINERY IS NEW and was constructed by well known designers and manufacturers of fertilizer appliances. It is in every particular of the

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CAPACITY OF ABOUT 10,000 TONS per year in complete goods. The Territory within the scope of this Plant includes Delaware, Maryland, Virginia, New Jersey and Pennsylvania. About 900 tons are consumed yearly in the territory immediately adjacent to the works.

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Virgin Forest in best timbered section of West Virginia. Experts measured off several one acre blocks on N., S., E. and W. portions of this tract, and then measured the timber thereon, using Scribner's Lumber and Log Book. Best acre measured 80,097 feet B. M.; thinnest acre, 19,964 feet; general average, 39,271 feet per acre, divided as follows, viz: Hemlock, 19,006 feet; Spruce, 11,358 feet; Cherry, 2,778 feet; Maple, 2,077 feet; Birch, 1,112 feet; Sugar, 948 feet; Ash, 724 feet; Beech, 818 feet; and Cucumber, 270 feet. Total amount of merchantable timber on this tract (approximated)

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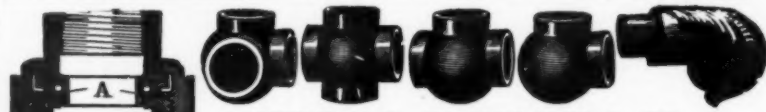
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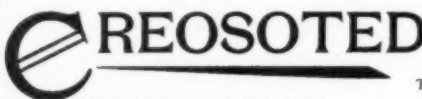
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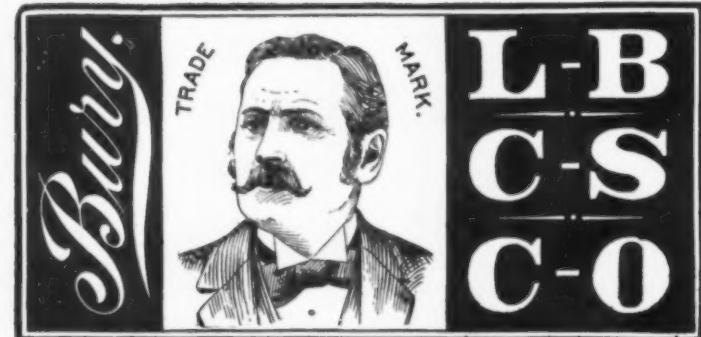
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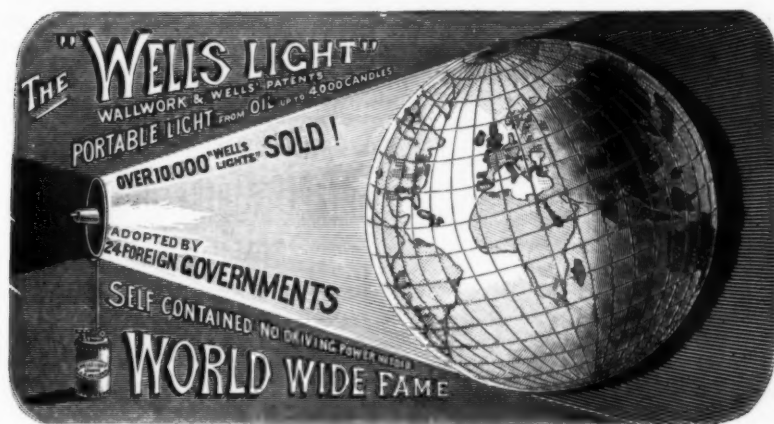
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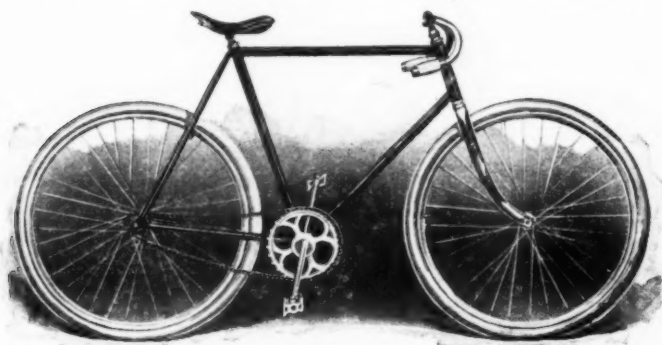
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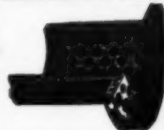
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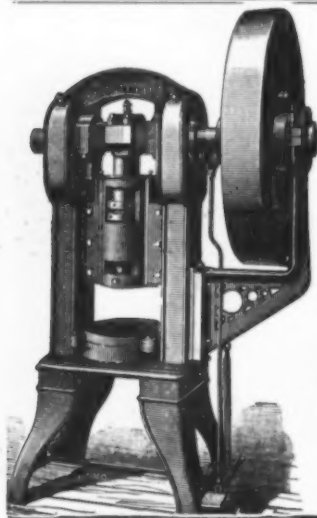
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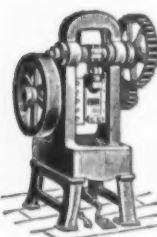
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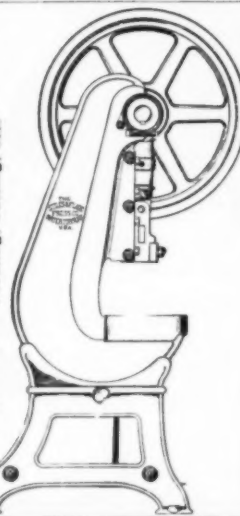
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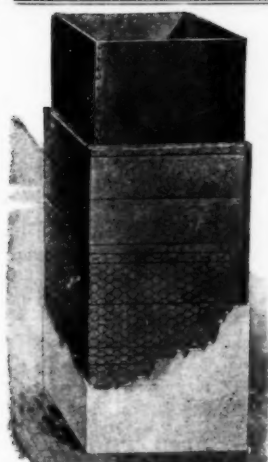
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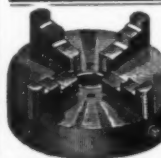
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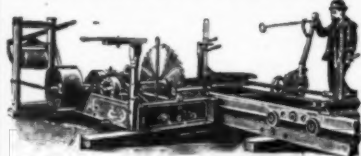
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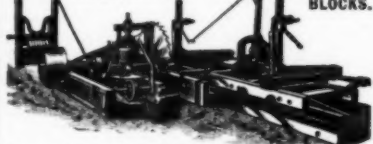
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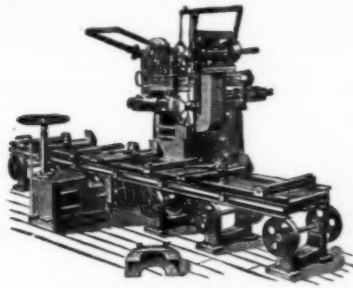
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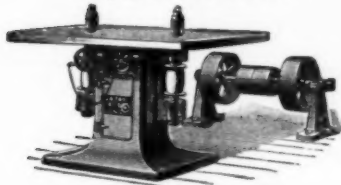
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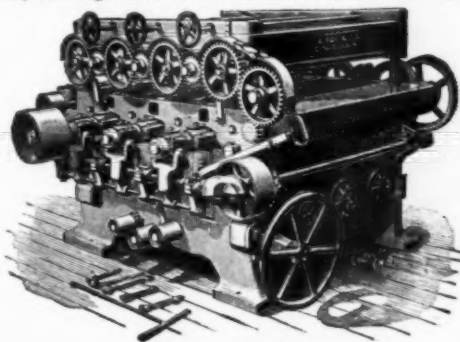


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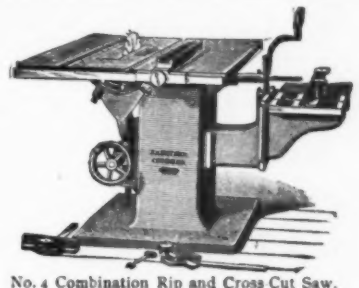
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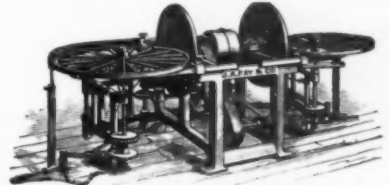


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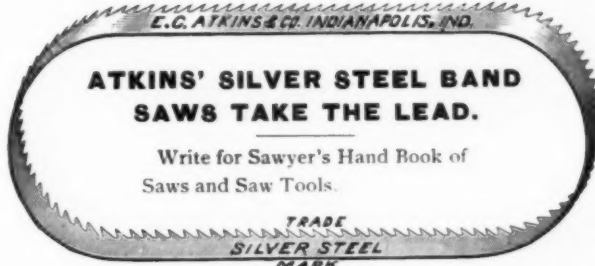
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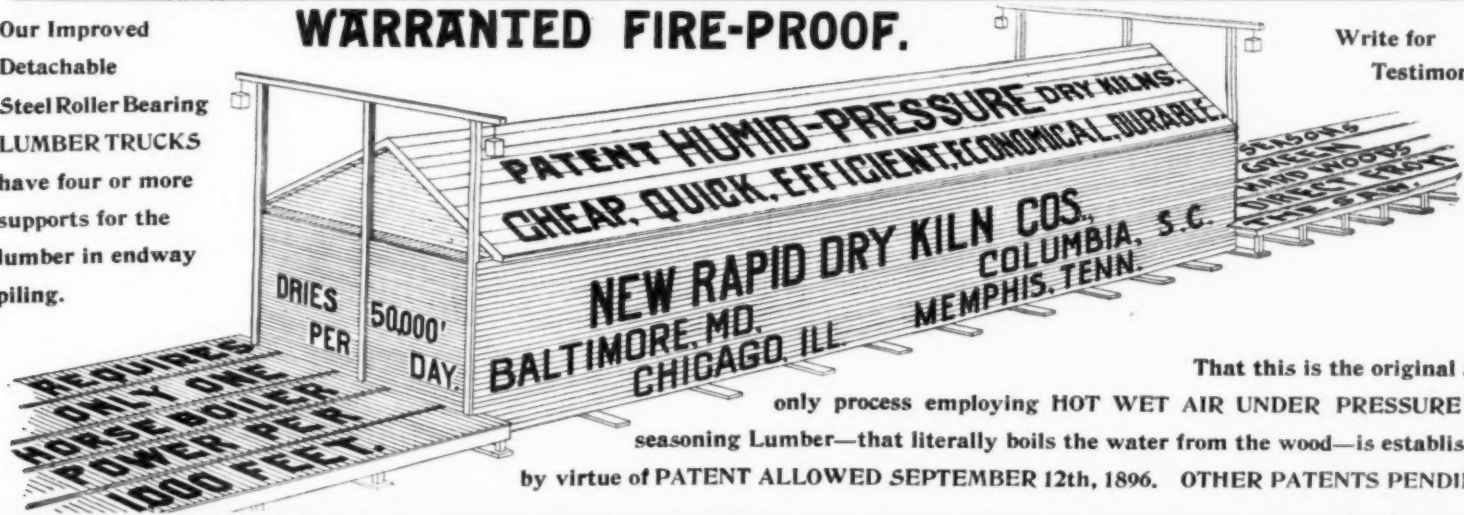


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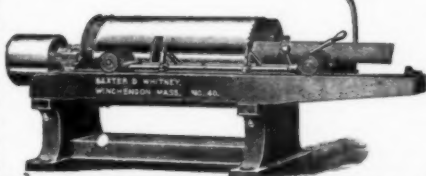
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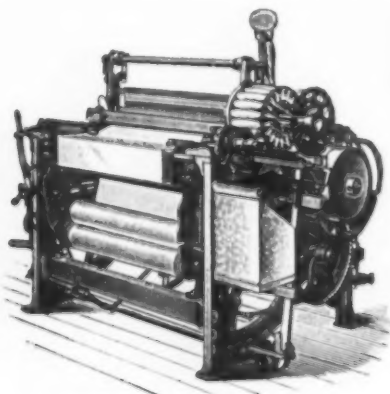
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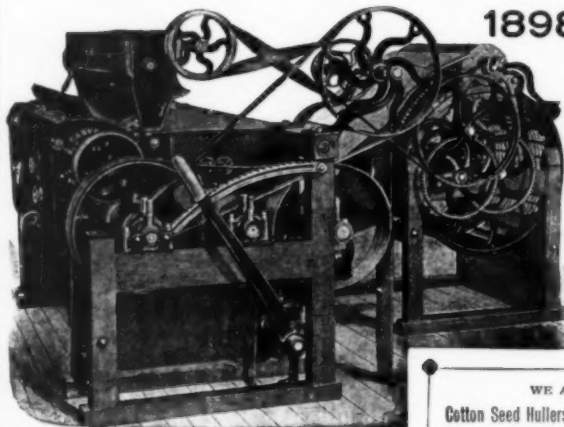
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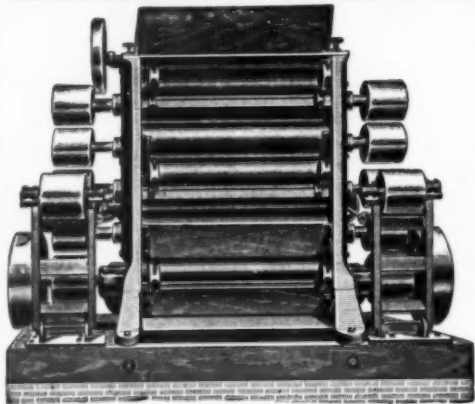


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MYRON FISH, Treas.

JOHN A. CARTER, Sec'y

JOSEPH H. KENDRICK, General Manager.

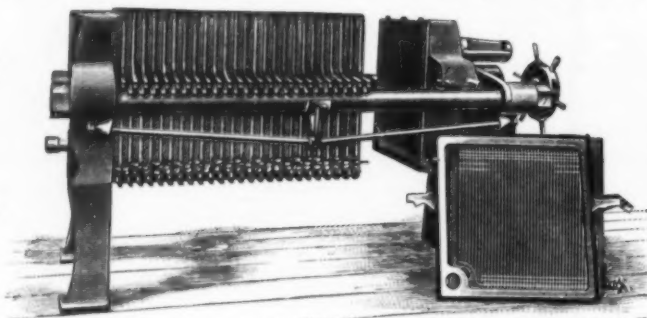
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Air Compressors.

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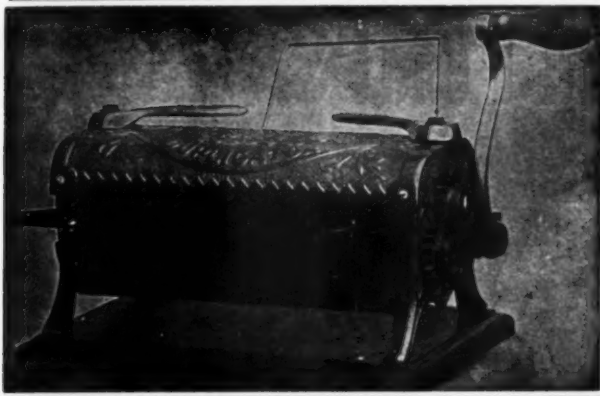
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Connect at Portsmouth with Seaboard Air
Line solid train Portsmouth to Atlanta.

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Comfort with Chesapeake & Ohio Railway
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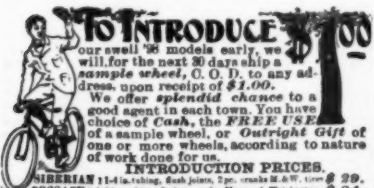
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Berths free. Reserve staterooms in advance
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Any color, style, gear, height frame wanted.
97 and 98 Models, various makes and styles \$12 to \$18
Wheels, slightly used, modern types.
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Rates, \$2.50 to \$4.00.

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liar with the manufacture of "overalls,"
cheap shirts and trousers, the cost of making, ca-
pacity of such machinery, cost of manufacture,
etc.; right man can get superintendency of pro-
spective plant here; one familiar with knitting
machinery and the manufacture of hosiery and
underwear preferred. Address E. K. BRYAN,
Jr., Secretary Business Men's Association, Dan-
ville, Va. a1

WANTED—A draughtsman, accustomed to en-
gine work preferred; permanent position
to the right party. Address K. D. C., care Manu-
facturers' Record. a1

WANTED—Agents to sell an article that eight
out of ten factories, mills, stores and private
families must use. Address EUREKA MFG. CO.,
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WANTED—Superintendent for new underwear
mill making plain and ribbed cotton under-
wear; making a specialty of summer goods. Ad-
dress J. C. Collier Co., Barnesville, Ga. m18

WANTED.—At once, by mill of 10,000 spindles,
a reliable man as superintendent, middle
age, experienced in manufacture of cotton plaids
and sheetings. Parties must give reference as to

ability, etc. Address P. O. BOX 190, Tuscaloosa,
Ala. m18

WANTED—To secure the services of a practi-
cal slate expert in the capacity of superin-
tendent or foreman. Address Jackson, Meshier
Mining Co., 40½ Whitehall St., Atlanta, Ga. m18

WANTED.—Traveling salesmen on salary or
commission to sell our steel pens to offices,
banks and stationers. Agents need apply.
Address SPOT CASH PEN CO., Boston, Mass.

WANTED.—Capable, reliable, enterprising
business man to take entire control of novel
device for advertising. Small capital required to
push device, not to buy it. Address ADVER-
TISER, care Manufacturers' Record.

SITUATIONS WANTED.

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for each insertion.

WANTED—Young man of experience desires
position as stenographer with good South-
ern firm; good references; can use Smith or Rem-
ington machine; moderate salary to start. Ad-
dress NORTH, 2125 Broad St., Nashville, Tenn. a1

WANTED—Situation by practical lumberman
both in long leaf and North Carolina pine;
understands buying and inspection; also book-

keeping and office work, chartering and clearing
of vessels; six years among Georgia mills. Ad-
dress LUMBERMAN, care Mfrs. Record. a1

WANTED—Situation as estimator or superin-
tendent of sash and door factory, planing
mill or the erection of buildings; experienced in
all details of building, factory work and office
duties. Address M. M. TAYLOR, 1931 W. Jeffer-
son street, Louisville, Ky. a1

A YOUNG MAN, aged 34 years, 14 of which
have been spent in the ice business, desires
a position as manager of some ice concern; un-
derstands the business in all its details, and is a
hustler after trade; is now employed but wants a
change; salary wanted \$1800 per annum. Address
ICE, care Manufacturers' Record. m25

WANTED—A position by young man (22) as
bookkeeper or stenographer; have had some
experience; best of reference. Address "R," Box
185, Campbellsville, Ky. m25

WANTED.—A position by man who has had
twenty-five years' experience in railway
service; understands construction and track
work, and engineer as well as traffic work, also
telegraphing. Unquestionable reference furnish-
ed if required. Address RAILROAD, care Manu-
facturers' Record. m18

WANTED.—Situation as superintendent or
foreman of machine shop; twenty years'
experience in some of the best plants East.
Reasons for change given. Address JOSEPH
MCLELLAN, Engineer No. 7 Hartford Fire
Department, Hartford, Conn. m18

CHEMIST; experienced in the care of ma-
chinery; for the last three years in charge of
a large plant. Wants a position as superin-
tendent, manager or assistant. Address H. C. C.,
care Manufacturers' Record. m18

WANTED—By a Northern Railroad man a po-
sition as superintendent or train master on
some new road or with a lumber company oper-
ating railroad line; thoroughly understand trans-
portation, operating and construction; best of
recommendations. Address JACOB S., care Manu-
facturers' Record. m18

WANTED—By an architectural draughtsman,
who is practical, steady and industrious;
married; would like a steady position. Ad-
dress E. A. S., 624 E. 15th street, Sedalia, Mo. m18

A COLLEGE graduate, with five years' experi-
ence in teaching, desires position as teacher;
can give good references. Address COLLEGE
GRADUATE, care Manufacturers' Record. m18

A SALESMAN, visiting the trade of Virginia
and West Virginia, would like to have a line
of pocket and table cutlery, with general hard-
ware, etc., as a side line on commission. Address
EXPERIENCE, care Mfrs. Record. m18

SALESMAN wants full line of cutlery as a side
line for Virginia on commission; ten years'
experience; reference and bond given; I will also
consider any line that promises good profits; all
who want Virginia covered write to W. S. BUCH-
ANAN, Oakland, P. O., Louisa Co., Va. m18

WANTED—Situation as engineer on logging
road in the South; twelve years' experience
with Shay and other logging locomotives; no
break-downs, consequently no stopping of trains;
wages reasonable. Address W. V. ELLIOTT,
Lima, O. m18

WANTED—By reliable coach and house paint-
er of fifteen to eighteen years' experience
situation as foreman; is also good paper stencil
maker, wire tie; is employed at present, but de-
sires a change. Address E. E. A., Lock Box 15,
Pulask, Va. m18

POSITION wanted as salesman, estimator,
draughtsman or foreman for sash, door and
blind or mill work for buildings; am practical;
can operate any wood-working machine; expert
on band saw, shaper and molding machine; willing
to begin at the bottom with a good Southern con-
cern where merit can win advancement. Address
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DIE MAKER.—An A1 die and tool maker, well
up in all modern improved dies and tools
for hardware, novelty and bicycle work, etc.; also
compound dies, automatic feeds, stops, jigs, etc.;
am a draughtsman, age 32; twelve years' expe-
rience in New England; can handle men; can
start March 1. Address NEW ENGLAND, care
Manufacturers' Record. m11

WANTED—Position as architectural draughts-
man; six years' experience in residences
and office buildings. Address ADLAI OSBORNE,
307 N. Graham street, Charlotte, N. C. m11

A YOUNG man of executive ability, has a man-
ufacturing and mercantile experience of 18
years in metal, wood and paint trades, as manager,
salesman, buyer, cost clerk and accountant, is
also familiar with advertising and catalogue
work, has knowledge of mechanics and drafting,
desires a position; best of references. Address
H. H., care Manufacturers' Record. m11

WANTED—By young man, twenty-four, situa-
tion of some kind; eight years' clerical expe-
rience; good references. Address C. G.
HACKER, 113 Ashley Ave., Charleston, S. C. m11

WANTED—Mechanical engineer, age twenty-
four years, recent graduate of one of the
leading engineering institutions of the country,
with shop and drafting room experience, desires
position of any kind in engineering; best of
recommendations. Address ENERGETIC, care
Manufacturers' Record. m11



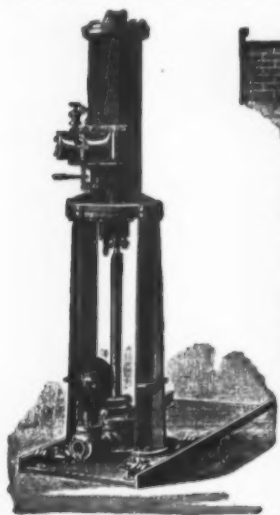
Mfd. by J. C. STEELE & SONS, Statesville, N. C.
Send for catalog and price list.

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M. BRADFORD, Supt.

82 Bank Street, NORFOLK, VA.
Legitimate work solicited in any part of the
country. Write for references.



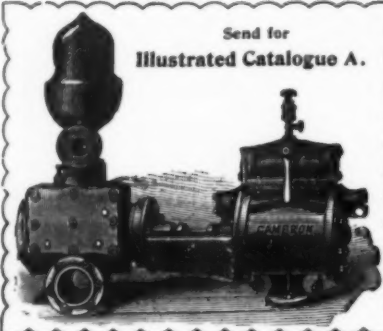
Artesian Well Pumps



Mining Pumps

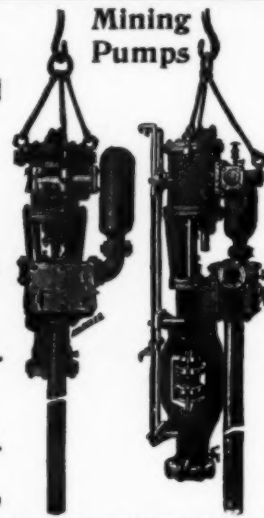
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COMPACT,
DURABLE,
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ADAPTED TO
ALL PURPOSES.
NO OUTSIDE
VALVE GEAR.



Piston Pattern. Plunger Pattern.

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FLY-WHEEL
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PUMPS. THE A. S. CAMERON STEAM PUMP WORKS,
Foot of East 23d St., NEW YORK.

THE SNOW STEAM PUMP WORKS, BUFFALO, N. Y. Pumping Machinery

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Charlotte Supply Co., Charlotte, N. C., Agents for North Carolina.
Bailey-Lobby Co., Charleston, S. C., Agents for South Carolina.
English Supply & Engine Co., Agents, Kansas City, Mo.

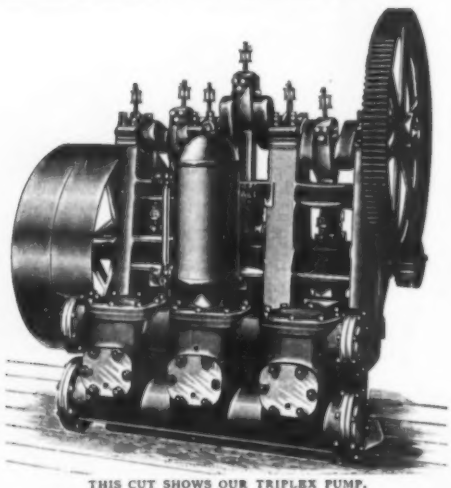
DEAN BROS. STEAM PUMP WORKS.



PUMPING MACHINERY FOR ALL PURPOSES. INDIANAPOLIS, IND. SEND FOR CATALOGUE AND PRICES

The PULSOMETER STEAM PUMP
"THE CONTRACTOR'S FRIEND."
Often Imitated—Never Equaled. Over 20,000 in Use.
RECENT IMPORTANT IMPROVEMENTS.
The Handiest, Simplest, and Most Efficient Steam Pump for General Mining, Quarrying, Railroads, Irrigating, Drainage, Coal-washing, Tank-filling, Paper Mill, Sewer and Bridge Contractors' Purposes, etc., etc. Muddy or gritty liquids handled without injury to the Pump.
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Catalogue on application. Correspondence solicited.

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Duplex and Single
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LATEST AND MOST
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SINGLE and
DOUBLE ACTING.

Single Condensers.
Air Compressors.

HEAVY PRESSURE MINING PUMPS, Steam and Electrical.

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RAND AIR COMPRESSORS

For All Purposes and of All Sizes.
SIMPLE. DURABLE. ECONOMICAL.

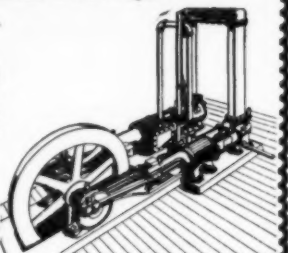
Our DUPLEX COMPRESSOR, Compound Air Cylinders, with Inter-Cooler and Compound Steam Cylinders, with Meyer Cut-off Valves, is the best construction for small and medium sizes.

Don't forget our ROCK DRILLS.

RAND DRILL CO.

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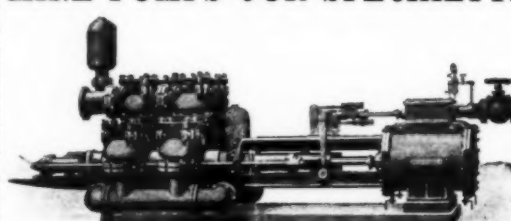
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The
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Most
Durable.

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Use in
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Artesian
Well Contractor
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Can Furnish Full Outfits
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Machinery,
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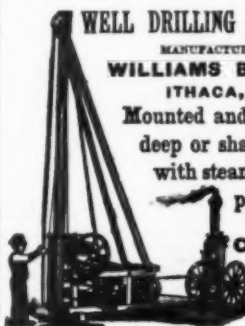
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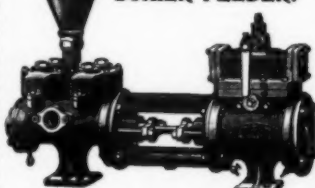
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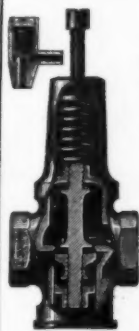
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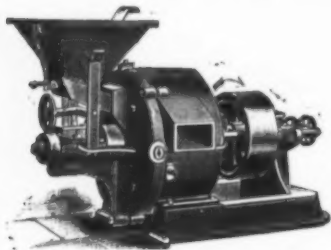
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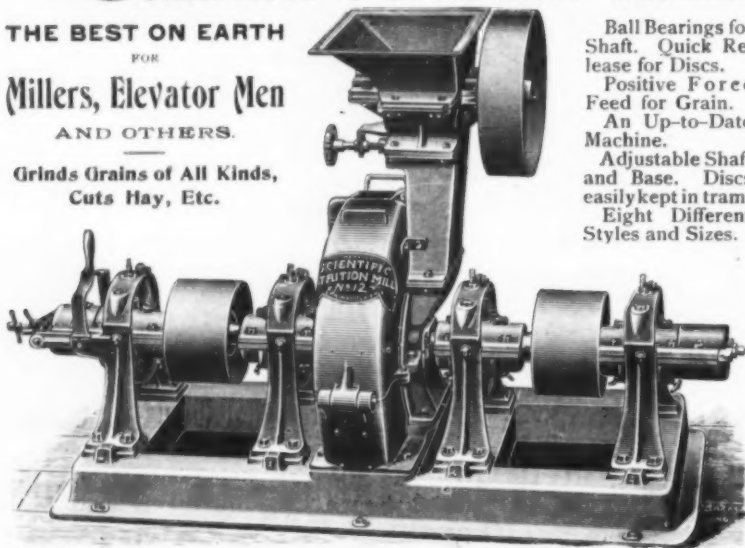
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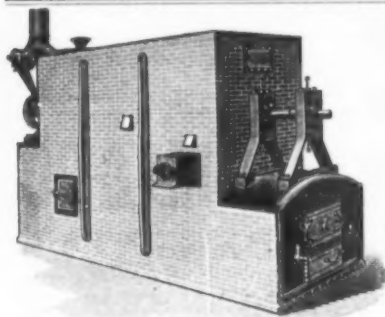
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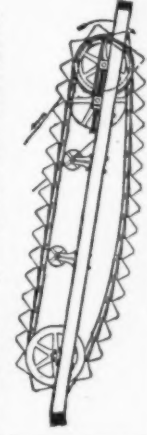
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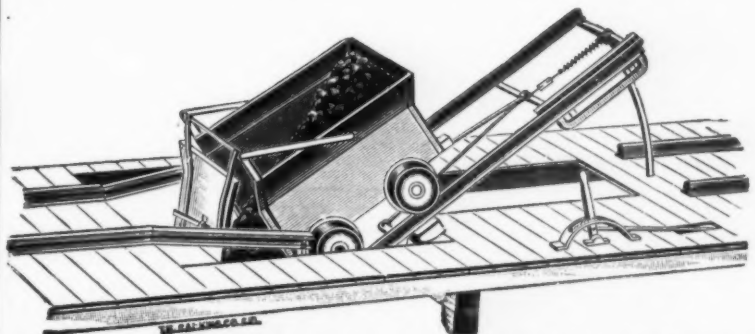
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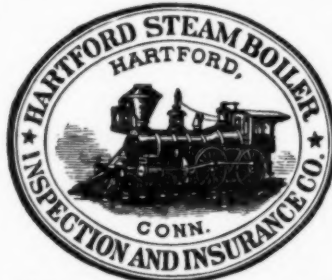
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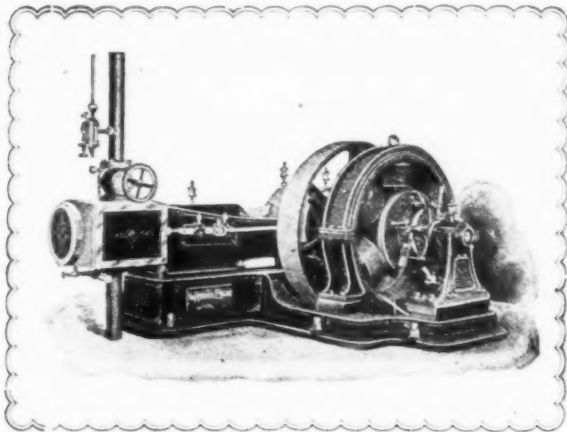
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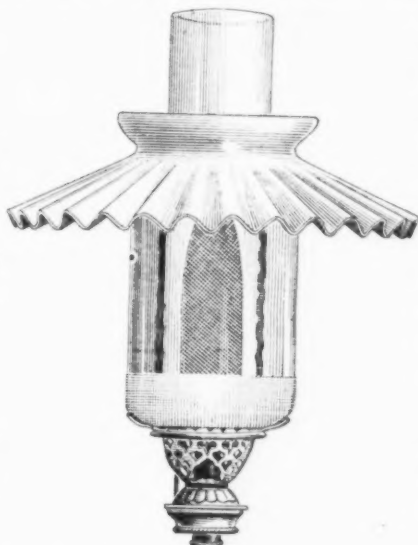
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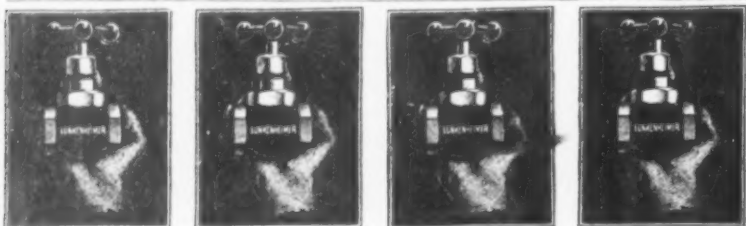
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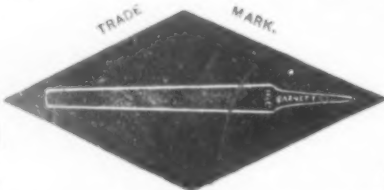
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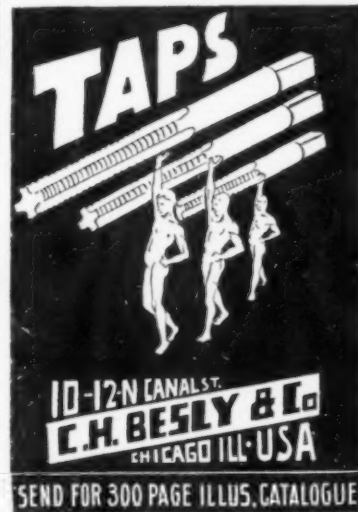
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